

**If you plan to submit a bid directly to the Department of Transportation**

**PREQUALIFICATION**

Any contractor who desires to become pre-qualified to bid on work advertised by IDOT must submit the properly completed pre-qualification forms to the Bureau of Construction no later than 4:30 p.m. prevailing time twenty-one days prior to the letting of interest. This pre-qualification requirement applies to first time contractors, contractors renewing expired ratings, contractors maintaining continuous pre-qualification or contractors requesting revised ratings. To be eligible to bid, existing pre-qualification ratings must be effective through the date of letting.

**REQUESTS FOR AUTHORIZATION TO BID**

Contractors downloading and/or ordering CD-ROM's and are wanting to bid on items included in a particular letting must submit the properly completed "Request for Authorization to Bid/or Not For Bid Status" (BDE 124INT) and the ORIGINAL, signed and notarized, "Affidavit of Availability" (BC 57) to the proper office no later than 4:30 p.m. prevailing time, three (3) days prior to the letting date.

**WHO CAN BID ?**

Bids will be accepted from only those companies that request and receive written **Authorization to Bid** from IDOT's Central Bureau of Construction.

**WHAT CONSTITUTES WRITTEN AUTHORIZATION TO BID?** When a prospective prime bidder submits a "Request for Authorization to Bid/or Not For Bid Status"(BDE 124INT) he/she must indicate at that time which items are being requested For Bidding purposes. Only those items requested For Bidding will be analyzed. After the request has been analyzed, the bidder will be issued a **Proposal Denial and/or Authorization Form**, approved by the Central Bureau of Construction, that indicates which items have been approved For Bidding. If **Authorization to Bid** cannot be approved, the **Proposal Denial and/or Authorization Form** will indicate the reason for denial.

**ABOUT AUTHORIZATION TO BID:** Firms that have not received an authorization form within a reasonable time of complete and correct original document submittal should contact the department as to status. This is critical in the week before the letting. These documents must be received three days before the letting date. Firms unsure as to authorization status should call the Prequalification Section of the Bureau of Construction at the number listed at the end of these instructions.

**ADDENDA AND REVISIONS:** It is the contractor's responsibility to determine which, if any, addenda or revisions pertain to any project they may be bidding. Failure to incorporate all relevant addenda or revisions may cause the bid to be declared unacceptable.

Each addendum will be placed with the contract number. Addenda and revisions will also be placed on the Addendum/Revision Checklist and each subscription service subscriber will be notified by e-mail of each addendum and revision issued.

The Internet is the Department's primary way of doing business. The subscription server e-mails are an added courtesy the Department provides. It is suggested that bidder check IDOT's website <http://www.dot.il.gov/desenv/delett.html> before submitting final bid information.

**IDOT is not responsible for any e-mail related failures.**

Addenda Questions may be directed to the Contracts Office at (217)782-7806 or [D&Econtracts@dot.il.gov](mailto:D&Econtracts@dot.il.gov)

Technical Questions about downloading these files may be directed to Tim Garman (217)524-1642 or [garmantr@dot.il.gov](mailto:garmantr@dot.il.gov).

**WHAT MUST BE INCLUDED WHEN BIDS ARE SUBMITTED?:** Bidders need not return the entire proposal when bids are submitted. That portion of the proposal that must be returned includes the following:

1. All documents from the Proposal Cover Sheet through the Proposal Bid Bond
2. Other special documentation and/or information that may be required by the contract special provisions

All proposal documents, including Proposal Guaranty Checks or Proposal Bid Bonds, should be stapled together to prevent loss when bids are processed by IDOT personnel.

**ABOUT SUBMITTING BIDS:** It is recommended that bidders deliver bids in person to insure they arrive at the proper location prior to the time specified for the receipt of bids. Any bid received at the place of letting after the time specified will not be accepted.

**WHO SHOULD BE CALLED IF ASSISTANCE IS NEEDED?**

| <b>Questions Regarding</b>                   | <b>Call</b>   |
|--|---------------|
| Prequalification and/or Authorization to Bid | (217)782-3413 |
| Preparation and submittal of bids            | (217)782-7806 |
| Mailing of plans and proposals               | (217)782-7806 |
| Electronic plans and proposals               | (217)524-1642 |

**ADDENDUMS AND REVISIONS TO THE PROPOSAL FORMS**

Planholders should verify that they have received and incorporated the addendum and/or revision prior to submitting their bid. Failure by the bidder to include an addendum could result in a bid being rejected as irregular.

# 178

RETURN WITH BID

|                       |
|-----------------------|
| Proposal Submitted By |
| Name                  |
| Address               |
| City                  |

## Letting June 16, 2006

**BIDDERS NEED NOT RETURN THE ENTIRE PROPOSAL**  
(See instructions inside front cover)

### NOTICE TO PROSPECTIVE BIDDERS

This proposal can be used for bidding purposes by only those companies that request and receive written AUTHORIZATION TO BID from IDOT's Central Bureau of Construction.

(SEE INSTRUCTIONS ON THE INSIDE OF COVER)

# Notice To Bidders, Specifications, Proposal, Contract and Contract Bond



**Illinois Department  
of Transportation**

Springfield, Illinois 62764

**Contract No. 68205  
MCDONOUGH County  
Section 55-2  
Route FAP 315  
Project NHF-315(46)  
District 4 Construction Funds**

PLEASE MARK THE APPROPRIATE BOX BELOW:

- A Bid Bond is included.
- A Cashier's Check or a Certified Check is included

Prepared by

F

Checked by

(Printed by authority of the State of Illinois)

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## INSTRUCTIONS

**ABOUT IDOT PROPOSALS:** All proposals issued by IDOT are potential bidding proposals. Each proposal contains all Certifications and Affidavits, a Proposal Signature Sheet and a Proposal Bid Bond required for Prime Contractors to submit a bid after written **Authorization to Bid** has been issued by IDOT's Central Bureau of Construction.

**WHO CAN BID?:** Bids will be accepted from only those companies that request and receive written **Authorization to Bid** from IDOT's Central Bureau of Construction. To request authorization, a potential bidder must complete and submit Part B of the Request for Authorization to Bid/or Not For Bid Status form (BDE 124 INT) and submit an original Affidavit of Availability (BC 57).

**WHAT CONSTITUTES WRITTEN AUTHORIZATION TO BID?:** When a prospective prime bidder submits a "Request for Proposal Forms and Plans" he/she must indicate at that time which items are being requested For Bidding purposes. Only those items requested For Bidding will be analyzed. After the request has been analyzed, the bidder will be issued a **Proposal Denial and/or Authorization Form**, approved by the Central Bureau of Construction, that indicates which items have been approved For Bidding. If **Authorization to Bid** cannot be approved, the **Proposal Denial and/or Authorization Form** will indicate the reason for denial. If a contractor has requested to bid but has not received a **Proposal Denial and/or Authorization Form**, they should contact the Central Bureau of Construction in advance of the letting date.

**WHAT MUST BE INCLUDED WHEN BIDS ARE SUBMITTED?:** Bidders need not return the entire proposal when bids are submitted. That portion of the proposal that must be returned includes the following:

1. All documents from the Proposal Cover Sheet through the Proposal Bid Bond
2. Other special documentation and/or information that may be required by the contract special provisions

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### WHO SHOULD BE CALLED IF ASSISTANCE IS NEEDED?

| Questions Regarding                          | Call         |
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| Prequalification and/or Authorization to Bid | 217/782-3413 |
| Preparation and submittal of bids            | 217/782-7806 |
| Mailing of CD-ROMS                           | 217/782-7806 |

RETURN WITH BID



PROPOSAL

TO THE DEPARTMENT OF TRANSPORTATION

1. Proposal of \_\_\_\_\_

\_\_\_\_\_

Taxpayer Identification Number (Mandatory) \_\_\_\_\_

for the improvement identified and advertised for bids in the Invitation for Bids as:

**Contract No. 68205  
MCDONOUGH County  
Section 55-2  
Project NHF-315(46)  
Route FAP 315  
District 4 Construction Funds**

**This project consists of constructing 8.13 miles of four lane expressway for proposed IL Route 336 located 1.7 miles east of IL Route 61 to U.S. Route 136 east of Township Road 226 near Macomb.**

2. The undersigned bidder will furnish all labor, material and equipment to complete the above described project in a good and workmanlike manner as provided in the contract documents provided by the Department of Transportation. This proposal will become part of the contract and the terms and conditions contained in the contract documents shall govern performance and payments.

**RETURN WITH BID**

3. **ASSURANCE OF EXAMINATION AND INSPECTION/WAIVER.** The undersigned further declares that he/she has carefully examined the proposal, plans, specifications, form of contract and contract bond, and special provisions, and that he/she has inspected in detail the site of the proposed work, and that he/she has familiarized themselves with all of the local conditions affecting the contract and the detailed requirements of construction, and understands that in making this proposal he/she waives all right to plead any misunderstanding regarding the same.
  
4. **EXECUTION OF CONTRACT AND CONTRACT BOND.** The undersigned further agrees to execute a contract for this work and present the same to the department within fifteen (15) days after the contract has been mailed to him/her. The undersigned further agrees that he/she and his/her surety will execute and present within fifteen (15) days after the contract has been mailed to him/her contract bond satisfactory to and in the form prescribed by the Department of Transportation, in the penal sum of the full amount of the contract, guaranteeing the faithful performance of the work in accordance with the terms of the contract.
  
5. **PROPOSAL GUARANTY.** Accompanying this proposal is either a bid bond on the department form, executed by a corporate surety company satisfactory to the department, or a proposal guaranty check consisting of a bank cashier's check or a properly certified check for not less than 5 per cent of the amount bid or for the amount specified in the following schedule:

| <u>Amount of Bid</u> |                      | <u>Proposal Guaranty</u> |  | <u>Amount of Bid</u> |    | <u>Proposal Guaranty</u> |             |
|----------------------|----------------------|--------------------------|--|----------------------|----|--------------------------|-------------|
| Up to                | \$5,000 .....        | \$150                    |  | \$2,000,000          | to | \$3,000,000 .....        | \$100,000   |
| \$5,000              | to \$10,000 .....    | \$300                    |  | \$3,000,000          | to | \$5,000,000 .....        | \$150,000   |
| \$10,000             | to \$50,000 .....    | \$1,000                  |  | \$5,000,000          | to | \$7,500,000 .....        | \$250,000   |
| \$50,000             | to \$100,000 .....   | \$3,000                  |  | \$7,500,000          | to | \$10,000,000 .....       | \$400,000   |
| \$100,000            | to \$150,000 .....   | \$5,000                  |  | \$10,000,000         | to | \$15,000,000 .....       | \$500,000   |
| \$150,000            | to \$250,000 .....   | \$7,500                  |  | \$15,000,000         | to | \$20,000,000 .....       | \$600,000   |
| \$250,000            | to \$500,000 .....   | \$12,500                 |  | \$20,000,000         | to | \$25,000,000 .....       | \$700,000   |
| \$500,000            | to \$1,000,000 ..... | \$25,000                 |  | \$25,000,000         | to | \$30,000,000 .....       | \$800,000   |
| \$1,000,000          | to \$1,500,000 ..... | \$50,000                 |  | \$30,000,000         | to | \$35,000,000 .....       | \$900,000   |
| \$1,500,000          | to \$2,000,000 ..... | \$75,000                 |  | over                 |    | \$35,000,000 .....       | \$1,000,000 |

Bank cashier's checks or properly certified checks accompanying proposals shall be made payable to the Treasurer, State of Illinois, when the state is awarding authority; the county treasurer, when a county is the awarding authority; or the city, village, or town treasurer, when a city, village, or town is the awarding authority.

If a combination bid is submitted, the proposal guaranties which accompany the individual proposals making up the combination will be considered as also covering the combination bid.

The amount of the proposal guaranty check is \_\_\_\_\_ \$( \_\_\_\_\_ ). If this proposal is accepted and the undersigned shall fail to execute a contract bond as required herein, it is hereby agreed that the amount of the proposal guaranty shall become the property of the State of Illinois, and shall be considered as payment of damages due to delay and other causes suffered by the State because of the failure to execute said contract and contract bond; otherwise, the bid bond shall become void or the proposal guaranty check shall be returned to the undersigned.

**Attach Cashier's Check or Certified Check Here**

In the event that one proposal guaranty check is intended to cover two or more proposals, the amount must be equal to the sum of the proposal guaranties which would be required for each individual proposal. If the guaranty check is placed in another proposal, state below where it may be found.

The proposal guaranty check will be found in the proposal for:

Item \_\_\_\_\_

Section No. \_\_\_\_\_

County \_\_\_\_\_

**Mark the proposal cover sheet as to the type of proposal guaranty submitted.**

BD 354 (Rev. 11/2001)

**RETURN WITH BID**

6. **COMBINATION BIDS.** The undersigned further agrees that if awarded the contract for the sections contained in the following combination, he/she will perform the work in accordance with the requirements of each individual proposal comprising the combination bid specified in the schedule below, and that the combination bid shall be prorated against each section in proportion to the bid submitted for the same. If an error is found to exist in the gross sum bid for one or more of the individual sections included in a combination, the combination bid shall be corrected as provided in the specifications.

**When a combination bid is submitted, the schedule below must be completed in each proposal comprising the combination.**

**If alternate bids are submitted for one or more of the sections comprising the combination, a combination bid must be submitted for each alternate.**

**Schedule of Combination Bids**

| Combination No. | Sections Included in Combination | Combination Bid |       |
|-----------------|----------------------------------|-----------------|-------|
|                 |                                  | Dollars         | Cents |
|                 |                                  |                 |       |
|                 |                                  |                 |       |
|                 |                                  |                 |       |
|                 |                                  |                 |       |

7. **SCHEDULE OF PRICES.** The undersigned bidder submits herewith, in accordance with the rules and instructions, a schedule of prices for the items of work for which bids are sought. The unit prices bid are in U.S. dollars and cents, and all extensions and summations have been made. The bidder understands that the quantities appearing in the bid schedule are approximate and are provided for the purpose of obtaining a gross sum for the comparison of bids. If there is an error in the extension of the unit prices, the unit prices shall govern. Payment to the contractor awarded the contract will be made only for actual quantities of work performed and accepted or materials furnished according to the contract. The scheduled quantities of work to be done and materials to be furnished may be increased, decreased or omitted as provided elsewhere in the contract.
8. **CERTIFICATE OF AUTHORITY.** The undersigned bidder, if a business organized under the laws of another State, assures the Department that it will furnish a copy of its certificate of authority to do business in the State of Illinois with the return of the executed contract and bond. Failure to furnish the certificate within the time provided for execution of an awarded contract may be cause for cancellation of the award and forfeiture of the proposal guaranty to the State.

ILLINOIS DEPARTMENT OF TRANSPORTATION  
SCHEDULE OF PRICES  
CONTRACT  
NUMBER - 68205

State Job # - C-94-013-02  
PPS NBR - 4-44400-0200  
County Name - MCDONOUGH- -  
Code - 109 - -  
District - 4 - -  
Section Number - 55-2

Project Number  
NHF-0315/046/

Route  
FAP 315

| Item Number | Pay Item Description  | Unit of Measure | Quantity  | x | Unit Price | = | Total Price |
|-------------|-----------------------|-----------------|-----------|---|------------|---|-------------|
| A2002016    | T-AESCLUSUS GLA 2     | EACH            | 17.000    |   |            |   |             |
| A2002816    | T-CATALPA SPEC 2      | EACH            | 24.000    |   |            |   |             |
| A2002916    | T-CELTIS OCCID 2      | EACH            | 24.000    |   |            |   |             |
| A2005016    | T-GYMNOCLA DIO 2      | EACH            | 27.000    |   |            |   |             |
| A2006708    | T-QUERCUS MACR 1      | EACH            | 33.000    |   |            |   |             |
| B2001116    | T-CERCIS CAN TF 2     | EACH            | 27.000    |   |            |   |             |
| D2002760    | E-PINUS NIGRA 5'      | EACH            | 213.000   |   |            |   |             |
| K1005431    | SEEDLING MIX "A"      | UNIT            | 54.000    |   |            |   |             |
| XX003289    | REMOVE SHOOFLY TRACK  | FOOT            | 3,258.000 |   |            |   |             |
| XX005077    | SAN SEW 8 T2 DI CL52  | FOOT            | 200.000   |   |            |   |             |
| XX005369    | TRAF CONT-PROT TEMP D | L SUM           | 1.000     |   |            |   |             |
| XX005657    | ROCK FILL FOUNDATION  | CU YD           | 1,545.000 |   |            |   |             |
| X0301512    | GDRL AGG EROS CONT    | TON             | 2,001.000 |   |            |   |             |
| X0320547    | REM & REIN END SECT   | EACH            | 1.000     |   |            |   |             |
| X0321475    | PIPE ELBOW, 12"       | EACH            | 12.000    |   |            |   |             |



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 Code - 109 - -  
 District - 4 - -  
 Section Number - 55-2

Project Number  
 NHF-0315/046/

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 FAP 315

| Item Number | Pay Item Description  | Unit of Measure | Quantity  | x | Unit Price | = | Total Price |
|-------------|-----------------------|-----------------|-----------|---|------------|---|-------------|
| X0321583    | PIPE ELBOW 18"        | EACH            | 1.000     |   |            |   |             |
| X0322865    | GRAT END SECTION SPL  | EACH            | 1.000     |   |            |   |             |
| X0324895    | SAN SEW MH TA T1 F CL | EACH            | 1.000     |   |            |   |             |
| X0325109    | POROUS GRANULAR MATL  | CU YD           | 454.000   |   |            |   |             |
| X0325388    | INLET TB MI 604106 SP | EACH            | 7.000     |   |            |   |             |
| X0325389    | SILT CURTAIN REMOVAL  | SQ YD           | 266.000   |   |            |   |             |
| X0325393    | INLET TB MI 604101 SP | EACH            | 24.000    |   |            |   |             |
| X0325394    | STEEL P CUL SP JKD 24 | FOOT            | 160.000   |   |            |   |             |
| X0325395    | INLET TA MI 604101 SP | EACH            | 2.000     |   |            |   |             |
| X0488100    | REM EX SEPTIC TANK    | EACH            | 2.000     |   |            |   |             |
| X0840000    | SAN SEW REMOV 8       | FOOT            | 120.000   |   |            |   |             |
| X0919000    | TEMP PAVT REMOVAL     | SQ YD           | 6,346.000 |   |            |   |             |
| X2111000    | TOPSOIL EXCAVATION    | CU YD           | 4,515.000 |   |            |   |             |
| X2510630    | HD EROS CONTR BLANKET | SQ YD           | 1,191.000 |   |            |   |             |
| X3550010    | BIT BC SUPER          | TON             | 1,643.000 |   |            |   |             |

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|-------------|-----------------------|-----------------|-------------|---|------------|---|-------------|
| X3550500    | BIT BC SUPER 8        | SQ YD           | 4,349.000   |   |            |   |             |
| X4020500    | AGG SURF CSE B 6      | SQ YD           | 1,104.000   |   |            |   |             |
| X4066414    | BC SC SUPER "C" N50   | TON             | 668.000     |   |            |   |             |
| X4066426    | BC SC SUPER "D" N70   | TON             | 882.000     |   |            |   |             |
| X4073146    | B C PVT FD SUP 13.25  | SQ YD           | 263,016.000 |   |            |   |             |
| X4080020    | INCID BIT SUR SUP N50 | TON             | 34.000      |   |            |   |             |
| X5020501    | UNWAT STR EX PROT L1  | EACH            | 1.000       |   |            |   |             |
| X5020502    | UNWAT STR EX PROT L2  | EACH            | 1.000       |   |            |   |             |
| X5020503    | UNWAT STR EX PROT L3  | EACH            | 1.000       |   |            |   |             |
| X5020504    | UNWAT STR EX PROT L4  | EACH            | 1.000       |   |            |   |             |
| X8305410    | LT P S G 45MH T MT-TW | EACH            | 6.000       |   |            |   |             |
| Z0000990    | AGG FOR TEMP ACCESS   | TON             | 75.000      |   |            |   |             |
| Z0002500    | BALLAST DRAINS        | FOOT            | 1,127.000   |   |            |   |             |
| Z0002600    | BAR SPLICERS          | EACH            | 324.000     |   |            |   |             |
| Z0007601    | BLDG REMOV NO 1       | L SUM           | 1.000       |   |            |   |             |

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|-------------|-----------------------|-----------------|------------|---|------------|---|-------------|
| Z0007602    | BLDG REMOV NO 2       | L SUM           | 1.000      |   |            |   |             |
| Z0007603    | BLDG REMOV NO 3       | L SUM           | 1.000      |   |            |   |             |
| Z0007604    | BLDG REMOV NO 4       | L SUM           | 1.000      |   |            |   |             |
| Z0007605    | BLDG REMOV NO 5       | L SUM           | 1.000      |   |            |   |             |
| Z0007606    | BLDG REMOV NO 6       | L SUM           | 1.000      |   |            |   |             |
| Z0007607    | BLDG REMOV NO 7       | L SUM           | 1.000      |   |            |   |             |
| Z0007608    | BLDG REMOV NO 8       | L SUM           | 1.000      |   |            |   |             |
| Z0013798    | CONSTRUCTION LAYOUT   | L SUM           | 1.000      |   |            |   |             |
| Z0018700    | DRAINAGE STR REMOVED  | EACH            | 2.000      |   |            |   |             |
| Z0020800    | EROSION CONTROL CURB  | FOOT            | 7,624.000  |   |            |   |             |
| Z0022800    | FENCE REMOVAL         | FOOT            | 28,543.000 |   |            |   |             |
| Z0023600    | FILL EXIST CULVERTS   | EACH            | 3.000      |   |            |   |             |
| Z0026305    | FUR & MAIN AUTO VEH   | CAL MO          | 24.000     |   |            |   |             |
| Z0030260    | IMP ATTN TEMP FRN TL3 | EACH            | 4.000      |   |            |   |             |
| Z0030270    | IMP ATTN TEMP FRW TL3 | EACH            | 2.000      |   |            |   |             |

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|-------------|-----------------------|-----------------|-------------|---|------------|---|-------------|
| Z0036000    | OPEN-GR DRAIN BLANKET | CU YD           | 111,302.000 |   |            |   |             |
| Z0048665    | RR PROT LIABILITY INS | L SUM           | 1.000       |   |            |   |             |
| Z0049804    | R&D FRIABL ASB BLD 4  | L SUM           | 1.000       |   |            |   |             |
| Z0049901    | R&D NON-FR ASB BLD 1  | L SUM           | 1.000       |   |            |   |             |
| Z0049904    | R&D NON-FR ASB BLD 4  | L SUM           | 1.000       |   |            |   |             |
| Z0050900    | REM CONC FDN          | EACH            | 5.000       |   |            |   |             |
| Z0054500    | ROCK FILL             | TON             | 12,823.000  |   |            |   |             |
| Z0054505    | ROCK FILL REPLACE     | TON             | 455.000     |   |            |   |             |
| Z0064225    | SEAL ABAN WATER WELLS | EACH            | 4.000       |   |            |   |             |
| Z0064540    | SEEPAGE COLLAR        | EACH            | 18.000      |   |            |   |             |
| Z0065100    | SETTLEMENT PLATFORMS  | EACH            | 7.000       |   |            |   |             |
| Z0069700    | SUB-BALLAST           | CU YD           | 2,522.000   |   |            |   |             |
| Z0076600    | TRAINEES              | HOUR            | 3,000.000   |   | 0.800      |   | 2,400.000   |
| Z0077000    | VERT PLAST DRAIN WICK | FOOT            | 121,850.000 |   |            |   |             |
| 20100110    | TREE REMOV 6-15       | UNIT            | 646.000     |   |            |   |             |

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|-------------|-----------------------|-----------------|---------------|---|------------|---|-------------|
| 20100210    | TREE REMOV OVER 15    | UNIT            | 916.000       |   |            |   |             |
| 20100500    | TREE REMOV ACRES      | ACRE            | 33.000        |   |            |   |             |
| 20200100    | EARTH EXCAVATION      | CU YD           | 1,940,670.000 |   |            |   |             |
| 20200200    | ROCK EXCAVATION       | CU YD           | 9,170.000     |   |            |   |             |
| 20201200    | REM & DISP UNS MATL   | CU YD           | 55,414.000    |   |            |   |             |
| 20400800    | FURNISHED EXCAV       | CU YD           | 360,200.000   |   |            |   |             |
| 20700400    | POROUS GRAN EMB SPEC  | CU YD           | 2,182.000     |   |            |   |             |
| 20800150    | TRENCH BACKFILL       | CU YD           | 141.000       |   |            |   |             |
| 21001000    | GEOTECH FAB F/GR STAB | SQ YD           | 19,287.000    |   |            |   |             |
| 21101505    | TOPSOIL EXC & PLAC    | CU YD           | 97,659.000    |   |            |   |             |
| 21301052    | EXPLOR TRENCH 52      | FOOT            | 6,150.000     |   |            |   |             |
| 21400100    | GRADING & SHAP DITCH  | FOOT            | 796.000       |   |            |   |             |
| 25000210    | SEEDING CL 2A         | ACRE            | 103.300       |   |            |   |             |
| 25000312    | SEEDING CL 4A         | ACRE            | 243.250       |   |            |   |             |
| 25000322    | SEEDING CL 5A         | ACRE            | 243.250       |   |            |   |             |

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|-------------|-----------------------|-----------------|------------|---|------------|---|-------------|
| 25000400    | NITROGEN FERT NUTR    | POUND           | 31,141.000 |   |            |   |             |
| 25000500    | PHOSPHORUS FERT NUTR  | POUND           | 31,141.000 |   |            |   |             |
| 25000600    | POTASSIUM FERT NUTR   | POUND           | 31,141.000 |   |            |   |             |
| 25100115    | MULCH METHOD 2        | ACRE            | 346.000    |   |            |   |             |
| 25100630    | EROSION CONTR BLANKET | SQ YD           | 71,730.000 |   |            |   |             |
| 28000250    | TEMP EROS CONTR SEED  | POUND           | 54,000.000 |   |            |   |             |
| 28000300    | TEMP DITCH CHECKS     | EACH            | 732.000    |   |            |   |             |
| 28000400    | PERIMETER EROS BAR    | FOOT            | 4,396.000  |   |            |   |             |
| 28000500    | INLET & PIPE PROTECT  | EACH            | 99.000     |   |            |   |             |
| 28100125    | STONE RIPRAP CL B3    | SQ YD           | 21,320.000 |   |            |   |             |
| 28100127    | STONE RIPRAP CL B4    | SQ YD           | 4,635.000  |   |            |   |             |
| 28100129    | STONE RIPRAP CL B5    | SQ YD           | 215.000    |   |            |   |             |
| 28101500    | RIPRAP SPL            | SQ YD           | 2,238.000  |   |            |   |             |
| 28200200    | FILTER FABRIC         | SQ YD           | 18,802.000 |   |            |   |             |
| 28300400    | AGGREGATE DITCH       | TON             | 17,551.000 |   |            |   |             |

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|-------------|-----------------------|-----------------|-------------|---|------------|---|-------------|
| 28400100    | GABIONS               | CU YD           | 152.000     |   |            |   |             |
| 28500100    | FAB FORM CONC REV MAT | SQ YD           | 558.000     |   |            |   |             |
| 30103000    | SHAPING & GRAD RDWAY  | UNIT            | 29.000      |   |            |   |             |
| 30200650    | PROCESS MOD SOIL 12   | SQ YD           | 378,790.000 |   |            |   |             |
| 30201250    | PROCESS MOD SOIL 24   | SQ YD           | 3,736.000   |   |            |   |             |
| 30201500    | LIME                  | TON             | 8,604.000   |   |            |   |             |
| 31100910    | SUB GRAN MAT A 12     | SQ YD           | 14,152.000  |   |            |   |             |
| 31100935    | SUB GRAN MAT A 18     | SQ YD           | 8,510.000   |   |            |   |             |
| 31100965    | SUB GRAN MAT A 24     | SQ YD           | 6,206.000   |   |            |   |             |
| 31102000    | SUB GRAN MAT C        | CU YD           | 40,353.000  |   |            |   |             |
| 35100700    | AGG BASE CSE A 8      | SQ YD           | 26,836.000  |   |            |   |             |
| 35101800    | AGG BASE CSE B 6      | SQ YD           | 6,454.000   |   |            |   |             |
| 35102000    | AGG BASE CSE B 8      | SQ YD           | 3,654.000   |   |            |   |             |
| 40200700    | AGG SURF CSE A 8      | SQ YD           | 7,109.000   |   |            |   |             |
| 40200800    | AGG SURF CSE B        | TON             | 3,897.000   |   |            |   |             |

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|-------------|----------------------|-----------------|------------|---|------------|---|-------------|
| 40300200    | BIT MATLS PR CT      | TON             | 55.000     |   |            |   |             |
| 40300400    | BIT MATLS C&S CT     | TON             | 164.000    |   |            |   |             |
| 40300500    | COVER COAT AGG       | TON             | 602.000    |   |            |   |             |
| 40300600    | SEAL COAT AGG        | TON             | 342.000    |   |            |   |             |
| 40600200    | BIT MATLS PR CT      | TON             | 40.000     |   |            |   |             |
| 40600895    | CONSTRUC TEST STRIP  | EACH            | 2.000      |   |            |   |             |
| 40600980    | BIT SURF REM BUTT JT | SQ YD           | 223.000    |   |            |   |             |
| 40600990    | TEMPORARY RAMP       | SQ YD           | 190.000    |   |            |   |             |
| 42001165    | BR APPR PAVT         | SQ YD           | 1,175.000  |   |            |   |             |
| 42300400    | PCC DRIVEWAY PAVT 8  | SQ YD           | 128.000    |   |            |   |             |
| 44000100    | PAVEMENT REM         | SQ YD           | 26,897.000 |   |            |   |             |
| 44004250    | PAVED SHLD REMOVAL   | SQ YD           | 2,753.000  |   |            |   |             |
| 44201747    | CL D PATCH T4 8      | SQ YD           | 204.000    |   |            |   |             |
| 48101200    | AGGREGATE SHLDS B    | TON             | 30,058.000 |   |            |   |             |
| 48202400    | BIT SHLD SUPER 6     | SQ YD           | 1,429.000  |   |            |   |             |



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| 48202600    | BIT SHLD SUPER 8      | SQ YD           | 132,440.000 |   |            |   |             |
| 48300300    | PCC SHOULDERS 8       | SQ YD           | 70.000      |   |            |   |             |
| 50100100    | REM EXIST STRUCT      | EACH            | 1.000       |   |            |   |             |
| 50104400    | CONC HDWL REM         | EACH            | 14.000      |   |            |   |             |
| 50105210    | REM EXIST CULVERTS    | FOOT            | 341.000     |   |            |   |             |
| 50105220    | PIPE CULVERT REMOV    | FOOT            | 1,193.000   |   |            |   |             |
| 50200100    | STRUCTURE EXCAVATION  | CU YD           | 8,179.000   |   |            |   |             |
| 50300100    | FLOOR DRAINS          | EACH            | 24.000      |   |            |   |             |
| 50300225    | CONC STRUCT           | CU YD           | 2,729.800   |   |            |   |             |
| 50300255    | CONC SUP-STR          | CU YD           | 1,447.300   |   |            |   |             |
| 50300260    | BR DECK GROOVING      | SQ YD           | 4,008.000   |   |            |   |             |
| 50300300    | PROTECTIVE COAT       | SQ YD           | 5,083.000   |   |            |   |             |
| 50300516    | ELAST BRNG ASY T1 SPL | EACH            | 20.000      |   |            |   |             |
| 50400905    | F & E P P CON I-BM 42 | FOOT            | 2,564.000   |   |            |   |             |
| 50401105    | F & E P P CON I-BM 54 | FOOT            | 4,466.000   |   |            |   |             |

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|-------------|-----------------------|-----------------|-------------|---|------------|---|-------------|
| 50500105    | F & E STRUCT STEEL    | L SUM           | 1.000       |   |            |   |             |
| 50800105    | REINFORCEMENT BARS    | POUND           | 305,050.000 |   |            |   |             |
| 50800205    | REINF BARS, EPOXY CTD | POUND           | 642,970.000 |   |            |   |             |
| 51000105    | PIPE HANDRAIL         | FOOT            | 27.000      |   |            |   |             |
| 51000305    | PIPE HANDRAIL SPL     | FOOT            | 800.000     |   |            |   |             |
| 51100100    | SLOPE WALL 4          | SQ YD           | 547.000     |   |            |   |             |
| 51100500    | BIT CT AG SLOPEWALL 6 | SQ YD           | 2,935.000   |   |            |   |             |
| 51201300    | FUR STL PILE HP8X36   | FOOT            | 1,725.000   |   |            |   |             |
| 51201500    | FUR STL PILE HP10X57  | FOOT            | 2,455.000   |   |            |   |             |
| 51201600    | FUR STL PILE HP12X53  | FOOT            | 1,176.000   |   |            |   |             |
| 51201610    | FUR STL PILE HP12X63  | FOOT            | 5,225.000   |   |            |   |             |
| 51201800    | FUR STL PILE HP14X73  | FOOT            | 24,318.000  |   |            |   |             |
| 51202700    | DRIVE STL PILE        | FOOT            | 34,899.000  |   |            |   |             |
| 51203300    | TEST PILE ST HP8X36   | EACH            | 1.000       |   |            |   |             |
| 51203500    | TEST PILE ST HP10X57  | EACH            | 2.000       |   |            |   |             |

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|-------------|----------------------|-----------------|----------|---|------------|---|-------------|
| 51203600    | TEST PILE ST HP12X53 | EACH            | 4.000    |   |            |   |             |
| 51203610    | TEST PILE ST HP12X63 | EACH            | 2.000    |   |            |   |             |
| 51203800    | TEST PILE ST HP14X73 | EACH            | 11.000   |   |            |   |             |
| 51204315    | CONCRETE ENCASEMENT  | CU YD           | 224.000  |   |            |   |             |
| 51204600    | METAL SHOES          | EACH            | 216.000  |   |            |   |             |
| 51500100    | NAME PLATES          | EACH            | 10.000   |   |            |   |             |
| 54001001    | BOX CUL END SEC C1   | EACH            | 2.000    |   |            |   |             |
| 54001002    | BOX CUL END SEC C2   | EACH            | 2.000    |   |            |   |             |
| 54001003    | BOX CUL END SEC C3   | EACH            | 2.000    |   |            |   |             |
| 54001004    | BOX CUL END SEC C4   | EACH            | 2.000    |   |            |   |             |
| 54001005    | BOX CUL END SEC C5   | EACH            | 2.000    |   |            |   |             |
| 54001006    | BOX CUL END SEC C6   | EACH            | 2.000    |   |            |   |             |
| 54001007    | BOX CUL END SEC C7   | EACH            | 2.000    |   |            |   |             |
| 54001010    | BOX CUL END SEC C10  | EACH            | 2.000    |   |            |   |             |
| 54001011    | BOX CUL END SEC C11  | EACH            | 2.000    |   |            |   |             |

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|-------------|----------------------|-----------------|-----------|---|------------|---|-------------|
| 54001012    | BOX CUL END SEC C12  | EACH            | 2.000     |   |            |   |             |
| 54001014    | BOX CUL END SEC C14  | EACH            | 2.000     |   |            |   |             |
| 54003000    | CONC BOX CUL         | CU YD           | 1,725.000 |   |            |   |             |
| 54010403    | PCBC 4X3             | FOOT            | 192.000   |   |            |   |             |
| 54010604    | PCBC 6X4             | FOOT            | 72.000    |   |            |   |             |
| 54010605    | PCBC 6X5             | FOOT            | 357.000   |   |            |   |             |
| 54010606    | PCBC 6X6             | FOOT            | 588.000   |   |            |   |             |
| 54010807    | PCBC 8X7             | FOOT            | 587.000   |   |            |   |             |
| 54010808    | PCBC 8X8             | FOOT            | 314.000   |   |            |   |             |
| 54010905    | PCBC 9X5             | FOOT            | 300.000   |   |            |   |             |
| 54011007    | PCBC 10X7            | FOOT            | 388.000   |   |            |   |             |
| 542A0217    | P CUL CL A 1 12      | FOOT            | 65.000    |   |            |   |             |
| 542A0223    | P CUL CL A 1 18      | FOOT            | 163.000   |   |            |   |             |
| 542A0229    | P CUL CL A 1 24      | FOOT            | 729.000   |   |            |   |             |
| 542A0235    | P CUL CL A 1 30      | FOOT            | 403.000   |   |            |   |             |

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|-------------|----------------------|-----------------|-----------|---|------------|---|-------------|
| 542A0253    | P CUL CL A 1 48      | FOOT            | 74.000    |   |            |   |             |
| 542A0259    | P CUL CL A 1 54      | FOOT            | 132.000   |   |            |   |             |
| 542A1063    | P CUL CL A 2 18      | FOOT            | 200.000   |   |            |   |             |
| 542A1069    | P CUL CL A 2 24      | FOOT            | 2,110.000 |   |            |   |             |
| 542A1075    | P CUL CL A 2 30      | FOOT            | 148.000   |   |            |   |             |
| 542A1081    | P CUL CL A 2 36      | FOOT            | 123.000   |   |            |   |             |
| 542A1093    | P CUL CL A 2 48      | FOOT            | 266.000   |   |            |   |             |
| 542A1099    | P CUL CL A 2 54      | FOOT            | 259.000   |   |            |   |             |
| 542A1111    | P CUL CL A 2 66      | FOOT            | 184.000   |   |            |   |             |
| 542A1117    | P CUL CL A 2 72      | FOOT            | 320.000   |   |            |   |             |
| 542A1903    | P CUL CL A 3 18      | FOOT            | 128.000   |   |            |   |             |
| 542A1909    | P CUL CL A 3 24      | FOOT            | 211.000   |   |            |   |             |
| 542A1921    | P CUL CL A 3 36      | FOOT            | 112.000   |   |            |   |             |
| 542A1945    | P CUL CL A 3 60      | FOOT            | 424.000   |   |            |   |             |
| 542A2749    | P CUL CL A 4 24      | FOOT            | 117.000   |   |            |   |             |

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|-------------|----------------------|-----------------|----------|---|------------|---|-------------|
| 542A3391    | P CUL CL A 5 36      | FOOT            | 124.000  |   |            |   |             |
| 542A4009    | P CUL CL A 6 24      | FOOT            | 288.000  |   |            |   |             |
| 542D0220    | P CUL CL D 1 15      | FOOT            | 51.000   |   |            |   |             |
| 542D0223    | P CUL CL D 1 18      | FOOT            | 364.000  |   |            |   |             |
| 542D0226    | P CUL CL D 1 21      | FOOT            | 54.000   |   |            |   |             |
| 542D0229    | P CUL CL D 1 24      | FOOT            | 303.000  |   |            |   |             |
| 542D0235    | P CUL CL D 1 30      | FOOT            | 40.000   |   |            |   |             |
| 542D1063    | P CUL CL D 2 18      | FOOT            | 392.000  |   |            |   |             |
| 542D1075    | P CUL CL D 2 30      | FOOT            | 600.000  |   |            |   |             |
| 542D1903    | P CUL CL D 3 18      | FOOT            | 96.000   |   |            |   |             |
| 542D1909    | P CUL CL D 3 24      | FOOT            | 120.000  |   |            |   |             |
| 542D1915    | P CUL CL D 3 30      | FOOT            | 102.000  |   |            |   |             |
| 54201477    | P CUL 2 CS/A CP 12   | FOOT            | 28.000   |   |            |   |             |
| 54201483    | P CUL 2 CS/A CP 18   | FOOT            | 58.000   |   |            |   |             |
| 54201489    | P CUL 2 CS/A CP 24   | FOOT            | 64.000   |   |            |   |             |

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| 5421A012    | P CUL CL A 1 12 TEMP | FOOT            | 36.000   |   |            |   |             |
| 5421D018    | P CUL CL D 1 18 TEMP | FOOT            | 58.000   |   |            |   |             |
| 5421D024    | P CUL CL D 1 24 TEMP | FOOT            | 101.000  |   |            |   |             |
| 54213663    | PRC FLAR END SEC 18  | EACH            | 11.000   |   |            |   |             |
| 54213669    | PRC FLAR END SEC 24  | EACH            | 49.000   |   |            |   |             |
| 54213675    | PRC FLAR END SEC 30  | EACH            | 16.000   |   |            |   |             |
| 54213681    | PRC FLAR END SEC 36  | EACH            | 6.000    |   |            |   |             |
| 54213693    | PRC FLAR END SEC 48  | EACH            | 6.000    |   |            |   |             |
| 54213699    | PRC FLAR END SEC 54  | EACH            | 5.000    |   |            |   |             |
| 54213705    | PRC FLAR END SEC 60  | EACH            | 2.000    |   |            |   |             |
| 54215460    | CIP RC END SEC 60    | EACH            | 2.000    |   |            |   |             |
| 54215466    | CIP RC END SEC 66    | EACH            | 2.000    |   |            |   |             |
| 54215472    | CIP RC END SEC 72    | EACH            | 2.000    |   |            |   |             |
| 54215547    | MET END SEC 12       | EACH            | 12.000   |   |            |   |             |
| 54215550    | MET END SEC 15       | EACH            | 2.000    |   |            |   |             |

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| 54215553    | MET END SEC 18        | EACH            | 35.000   |   |            |   |             |
| 54215556    | MET END SEC 21        | EACH            | 2.000    |   |            |   |             |
| 54215559    | MET END SEC 24        | EACH            | 14.000   |   |            |   |             |
| 54215565    | MET END SEC 30        | EACH            | 6.000    |   |            |   |             |
| 54215571    | MET END SEC 36        | EACH            | 2.000    |   |            |   |             |
| 54215979    | R C PIPE ELBOW 24     | EACH            | 1.000    |   |            |   |             |
| 54218506    | R C PIPE TEE 72P 36R  | EACH            | 1.000    |   |            |   |             |
| 5422C024    | P CUL CL C 2 24 TEMP  | FOOT            | 119.000  |   |            |   |             |
| 5422D018    | P CUL CL D 2 18 TEMP  | FOOT            | 50.000   |   |            |   |             |
| 5422D024    | P CUL CL D 2 24 TEMP  | FOOT            | 50.000   |   |            |   |             |
| 5422D036    | P CUL CL D 2 36 TEMP  | FOOT            | 60.000   |   |            |   |             |
| 54223015    | R C PIPE TEE SPL      | EACH            | 1.000    |   |            |   |             |
| 54244405    | FL INLT BX MED 542546 | EACH            | 2.000    |   |            |   |             |
| 54244805    | INLET BOX 542501      | EACH            | 1.000    |   |            |   |             |
| 54245205    | INLET BOX 542511      | EACH            | 1.000    |   |            |   |             |



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| Item Number | Pay Item Description  | Unit of Measure | Quantity    | x | Unit Price | = | Total Price |
|-------------|-----------------------|-----------------|-------------|---|------------|---|-------------|
| 54246405    | INLET BOX 542531      | EACH            | 2.000       |   |            |   |             |
| 58000110    | MEMBRANE WATERPRF SPL | SQ FT           | 6,740.000   |   |            |   |             |
| 58700200    | BRIDGE SEAT SEALER    | SQ FT           | 544.000     |   |            |   |             |
| 59100100    | GEOCOMPOSITE WALL DR  | SQ YD           | 1,401.000   |   |            |   |             |
| 60100060    | CONC HDWL FOR P DRAIN | EACH            | 337.000     |   |            |   |             |
| 60100945    | PIPE DRAINS 12        | FOOT            | 952.000     |   |            |   |             |
| 60100965    | PIPE DRAINS 18        | FOOT            | 95.000      |   |            |   |             |
| 60107600    | PIPE UNDERDRAINS 4    | FOOT            | 163,676.000 |   |            |   |             |
| 60107700    | PIPE UNDERDRAINS 6    | FOOT            | 969.000     |   |            |   |             |
| 60108100    | PIPE UNDERDRAIN 4 SP  | FOOT            | 7,119.000   |   |            |   |             |
| 60108200    | PIPE UNDERDRAIN 6 SP  | FOOT            | 12.000      |   |            |   |             |
| 60109580    | P UNDR FOR STRUCT 4   | FOOT            | 932.000     |   |            |   |             |
| 60109582    | P UNDR FOR STRUCT 6   | FOOT            | 202.000     |   |            |   |             |
| 60218400    | MAN TA 4 DIA T1F CL   | EACH            | 3.000       |   |            |   |             |
| 60220005    | MAN TA 4D M IN 604101 | EACH            | 2.000       |   |            |   |             |

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 SCHEDULE OF PRICES  
 CONTRACT  
 NUMBER - 68205

State Job # - C-94-013-02  
 PPS NBR - 4-44400-0200  
 County Name - MCDONOUGH- -  
 Code - 109 - -  
 District - 4 - -  
 Section Number - 55-2

Project Number  
 NHF-0315/046/

Route  
 FAP 315

| Item Number | Pay Item Description  | Unit of Measure | Quantity  | x | Unit Price | = | Total Price |
|-------------|-----------------------|-----------------|-----------|---|------------|---|-------------|
| 60600095    | CLASS SI CONC OUTLET  | CU YD           | 53.000    |   |            |   |             |
| 60602400    | CONC GUTTER SPL       | FOOT            | 182.000   |   |            |   |             |
| 60608600    | COMB CC&G TM6.06      | FOOT            | 75.000    |   |            |   |             |
| 60610400    | COMB CC&G TM6.24      | FOOT            | 489.000   |   |            |   |             |
| 60618300    | CONC MEDIAN SURF 4    | SQ FT           | 167.000   |   |            |   |             |
| 60623711    | CONC MEDIAN           | SQ FT           | 326.000   |   |            |   |             |
| 60900240    | TY C INLET BOX 609006 | EACH            | 3.000     |   |            |   |             |
| 60900315    | TY D INLET BOX 609006 | EACH            | 2.000     |   |            |   |             |
| 60900515    | CONC THRUST BLOCKS    | EACH            | 10.000    |   |            |   |             |
| 61000115    | TY E INLET BOX 610001 | EACH            | 1.000     |   |            |   |             |
| 61000225    | TY F INLET BOX 610001 | EACH            | 6.000     |   |            |   |             |
| 63000000    | SPBGR TY A            | FOOT            | 9,437.500 |   |            |   |             |
| 63100045    | TRAF BAR TERM T2      | EACH            | 7.000     |   |            |   |             |
| 63100070    | TRAF BAR TERM T5      | EACH            | 6.000     |   |            |   |             |
| 63100085    | TRAF BAR TERM T6      | EACH            | 8.000     |   |            |   |             |

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Project Number  
 NHF-0315/046/

Route  
 FAP 315

| Item Number | Pay Item Description  | Unit of Measure | Quantity    | x | Unit Price | = | Total Price |
|-------------|-----------------------|-----------------|-------------|---|------------|---|-------------|
| 63100167    | TR BAR TRM T1 SPL TAN | EACH            | 12.000      |   |            |   |             |
| 63100169    | TR BAR TRM T1 SPL FLR | EACH            | 5.000       |   |            |   |             |
| 63500105    | DELINEATORS           | EACH            | 420.000     |   |            |   |             |
| 64200105    | SHOULDER RUMBLE STRIP | FOOT            | 168,490.000 |   |            |   |             |
| 66400575    | CH LK FENCE 10 SPL    | FOOT            | 15,115.000  |   |            |   |             |
| 66405500    | CH LK GATE 8X12 SINGL | EACH            | 2.000       |   |            |   |             |
| 66409600    | CH LK GATES 8X16 DBL  | EACH            | 2.000       |   |            |   |             |
| 66500105    | WOV W FENCE 4         | FOOT            | 9,533.000   |   |            |   |             |
| 66600105    | FUR ERECT ROW MARKERS | EACH            | 425.000     |   |            |   |             |
| 66700205    | PERM SURV MKRS T1     | EACH            | 18.000      |   |            |   |             |
| 66700305    | PERM SURV MKRS T2     | EACH            | 40.000      |   |            |   |             |
| 66700605    | PERM SURVEY TIES      | EACH            | 232.000     |   |            |   |             |
| 67000400    | ENGR FIELD OFFICE A   | CAL MO          | 24.000      |   |            |   |             |
| 67000600    | ENGR FIELD LAB        | CAL MO          | 24.000      |   |            |   |             |
| 67100100    | MOBILIZATION          | L SUM           | 1.000       |   |            |   |             |

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 FAP 315

| Item Number | Pay Item Description  | Unit of Measure | Quantity  | x | Unit Price | = | Total Price |
|-------------|-----------------------|-----------------|-----------|---|------------|---|-------------|
| 70100200    | TRAF CONT-PROT 701331 | EACH            | 2.000     |   |            |   |             |
| 70100450    | TRAF CONT-PROT 701201 | L SUM           | 1.000     |   |            |   |             |
| 70100460    | TRAF CONT-PROT 701306 | L SUM           | 1.000     |   |            |   |             |
| 70100500    | TRAF CONT-PROT 701326 | L SUM           | 1.000     |   |            |   |             |
| 70100700    | TRAF CONT-PROT 701406 | L SUM           | 1.000     |   |            |   |             |
| 70101830    | TRAF CONT-PROT BLR 21 | L SUM           | 1.000     |   |            |   |             |
| 70101835    | TRAF CONT-PROT BLR 22 | L SUM           | 1.000     |   |            |   |             |
| 70103815    | TR CONT SURVEILLANCE  | CAL DA          | 100.000   |   |            |   |             |
| 70300100    | SHORT-TERM PAVT MKING | FOOT            | 464.000   |   |            |   |             |
| 70300500    | PAVT MARKING TAPE T3  | FOOT            | 6,560.000 |   |            |   |             |
| 70301000    | WORK ZONE PAVT MK REM | SQ FT           | 1,913.000 |   |            |   |             |
| 70400500    | TEMP CON BAR (ST OWN) | FOOT            | 2,720.000 |   |            |   |             |
| 72000100    | SIGN PANEL T1         | SQ FT           | 1,487.000 |   |            |   |             |
| 72000200    | SIGN PANEL T2         | SQ FT           | 637.000   |   |            |   |             |
| 72600100    | MILEPOST MKR ASSEMBLY | EACH            | 16.000    |   |            |   |             |

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 NHF-0315/046/

Route  
 FAP 315

| Item Number | Pay Item Description  | Unit of Measure | Quantity    | x | Unit Price | = | Total Price |
|-------------|-----------------------|-----------------|-------------|---|------------|---|-------------|
| 73000100    | WOOD SIN SUPPORT      | FOOT            | 3,915.000   |   |            |   |             |
| 78001110    | PAINT PVT MK LINE 4   | FOOT            | 5,190.000   |   |            |   |             |
| 78003130    | PREF PL PM TB LINE 6  | FOOT            | 19,896.000  |   |            |   |             |
| 78005100    | EPOXY PVT MK LTR-SYM  | SQ FT           | 47.000      |   |            |   |             |
| 78005110    | EPOXY PVT MK LINE 4   | FOOT            | 191,026.000 |   |            |   |             |
| 78005130    | EPOXY PVT MK LINE 6   | FOOT            | 854.000     |   |            |   |             |
| 78005140    | EPOXY PVT MK LINE 8   | FOOT            | 5,923.000   |   |            |   |             |
| 78005150    | EPOXY PVT MK LINE 12  | FOOT            | 213.000     |   |            |   |             |
| 78005180    | EPOXY PVT MK LINE 24  | FOOT            | 292.000     |   |            |   |             |
| 78100100    | RAISED REFL PAVT MKR  | EACH            | 1,260.000   |   |            |   |             |
| 78100105    | RAISED REF PVT MKR BR | EACH            | 14.000      |   |            |   |             |
| 78200410    | GUARDRAIL MKR TYPE A  | EACH            | 78.000      |   |            |   |             |
| 78200520    | BAR WALL MKR TYPE B   | EACH            | 12.000      |   |            |   |             |
| 78201000    | TERMINAL MARKER - DA  | EACH            | 17.000      |   |            |   |             |
| 80400100    | ELECT SERV INSTALL    | EACH            | 4.000       |   |            |   |             |

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|-------------|-----------------------|-----------------|-----------|---|------------|---|-------------|
| 80803150    | WOOD LT POLE 55 CL 3  | EACH            | 12.000    |   |            |   |             |
| 81020500    | CON P 2 IM            | FOOT            | 620.000   |   |            |   |             |
| 81020700    | CON P 3 IM            | FOOT            | 120.000   |   |            |   |             |
| 81500200    | TR & BKFIL F ELECT WK | FOOT            | 3,200.000 |   |            |   |             |
| 81600215    | UD 2#8XLP1#8XLPG 3/4P | FOOT            | 935.000   |   |            |   |             |
| 81600315    | UD 2#6XLP 1#6XLPG 1P  | FOOT            | 3,570.000 |   |            |   |             |
| 81800600    | A CBL 2-1C2 AL MESS W | FOOT            | 2,350.000 |   |            |   |             |
| 82103900    | LUM SV MM 250W        | EACH            | 30.000    |   |            |   |             |
| 82500605    | LT CONTROL PC RELAY   | EACH            | 4.000     |   |            |   |             |
| 83054100    | LT P S G 45MH TEN MT  | EACH            | 6.000     |   |            |   |             |
| 83600355    | LP F M 15BC 8" X 6'   | EACH            | 6.000     |   |            |   |             |
| 83600357    | LP F M 15BC 8" X 8'   | EACH            | 6.000     |   |            |   |             |
| 83800650    | BKWY DEV COU SS SCR N | EACH            | 48.000    |   |            |   |             |
| 84100110    | REM TEMP LIGHT UNITS  | EACH            | 12.000    |   |            |   |             |

**CONTRACT NUMBER**

**68205**

**THIS IS THE TOTAL BID**

**\$ \_\_\_\_\_**

**NOTES:**

1. Each PAY ITEM should have a UNIT PRICE and a TOTAL PRICE.
2. The UNIT PRICE shall govern if no TOTAL PRICE is shown or if there is a discrepancy between the product of the UNIT PRICE multiplied by the QUANTITY.
3. If a UNIT PRICE is omitted, the TOTAL PRICE will be divided by the QUANTITY in order to establish a UNIT PRICE.
4. A bid may be declared UNACCEPTABLE if neither a unit price nor a total price is shown.

## RETURN WITH BID

### STATE REQUIRED ETHICAL STANDARDS GOVERNING CONTRACT PROCUREMENT: ASSURANCES, CERTIFICATIONS AND DISCLOSURES

#### I. GENERAL

A. Article 50 of the Illinois Procurement Code establishes the duty of all State chief procurement officers, State purchasing officers, and their designees to maximize the value of the expenditure of public moneys in procuring goods, services, and contracts for the State of Illinois and to act in a manner that maintains the integrity and public trust of State government. In discharging this duty, they are charged by law to use all available information, reasonable efforts, and reasonable actions to protect, safeguard, and maintain the procurement process of the State of Illinois.

B. In order to comply with the provisions of Article 50 and to carry out the duty established therein, all bidders are to adhere to ethical standards established for the procurement process, and to make such assurances, disclosures and certifications required by law. By execution of the Proposal Signature Sheet, the bidder indicates that each of the mandated assurances has been read and understood, that each certification is made and understood, and that each disclosure requirement has been understood and completed.

C. In addition to all other remedies provided by law, failure to comply with any assurance, failure to make any disclosure or the making of a false certification shall be grounds for termination of the contract and the suspension or debarment of the bidder.

#### II. ASSURANCES

A. The assurances hereinafter made by the bidder are each a material representation of fact upon which reliance is placed should the Department enter into the contract with the bidder. The Department may terminate the contract if it is later determined that the bidder rendered a false or erroneous assurance, and the surety providing the performance bond shall be responsible for the completion of the contract.

##### B. Felons

1. The Illinois Procurement Code provides:

Section 50-10. Felons. Unless otherwise provided, no person or business convicted of a felony shall do business with the State of Illinois or any state agency from the date of conviction until 5 years after the date of completion of the sentence for that felony, unless no person held responsible by a prosecutorial office for the facts upon which the conviction was based continues to have any involvement with the business.

2. The bidder assures the Department that the award and execution of the contract would not cause a violation of Section 50-10.

##### C. Conflicts of Interest

1. The Illinois Procurement Code provides in pertinent part:

Section 50-13. Conflicts of Interest.

(a) Prohibition. It is unlawful for any person holding an elective office in this State, holding a seat in the General Assembly, or appointed to or employed in any of the offices or agencies of state government and who receives compensation for such employment in excess of 60% of the salary of the Governor of the State of Illinois, or who is an officer or employee of the Capital Development Board or the Illinois Toll Highway Authority, or who is the spouse or minor child of any such person to have or acquire any contract, or any direct pecuniary interest in any contract therein, whether for stationery, printing, paper, or any services, materials, or supplies, that will be wholly or partially satisfied by the payment of funds appropriated by the General Assembly of the State of Illinois or in any contract of the Capital Development Board or the Illinois Toll Highway authority.

(b) Interests. It is unlawful for any firm, partnership, association or corporation, in which any person listed in subsection (a) is entitled to receive (i) more than 7 1/2% of the total distributable income or (ii) an amount in excess of the salary of the Governor, to have or acquire any such contract or direct pecuniary interest therein.

(c) Combined interests. It is unlawful for any firm, partnership, association, or corporation, in which any person listed in subsection (a) together with his or her spouse or minor children is entitled to receive (i) more than 15%, in the aggregate, of the total distributable income or (ii) an amount in excess of 2 times the salary of the Governor, to have or acquire any such contract or direct pecuniary interest therein.

(d) Securities. Nothing in this Section invalidates the provisions of any bond or other security previously offered or to be offered for sale or sold by or for the State of Illinois.

(e) Prior interests. This Section does not affect the validity of any contract made between the State and an officer or employee of the State or member of the General Assembly, his or her spouse, minor child or any combination of those persons if that contract was in existence before his or her election or employment as an officer, member, or employee. The contract is voidable, however, if it cannot be completed within 365 days after the officer, member, or employee takes office or is employed.

The current salary of the Governor is \$150,700.00. Sixty percent of the salary is \$90,420.00.



## RETURN WITH BID

2. The bidder assures the Department that the award and execution of the contract would not cause a violation of Section 50-13, or that an effective exemption has been issued by the Board of Ethics to any individual subject to the Section 50-13 prohibitions pursuant to the provisions of Section 50-20 of the Code and Executive Order Number 3 (1998). Information concerning the exemption process is available from the Department upon request.

### **D. Negotiations**

1. The Illinois Procurement Code provides in pertinent part:

Section 50-15. Negotiations.

(a) It is unlawful for any person employed in or on a continual contractual relationship with any of the offices or agencies of State government to participate in contract negotiations on behalf of that office or agency with any firm, partnership, association, or corporation with whom that person has a contract for future employment or is negotiating concerning possible future employment.

2. The bidder assures the Department that the award and execution of the contract would not cause a violation of Section 50-15, and that the bidder has no knowledge of any facts relevant to the kinds of acts prohibited therein.

### **E. Inducements**

1. The Illinois Procurement Code provides:

Section 50-25. Inducement. Any person who offers or pays any money or other valuable thing to any person to induce him or her not to bid for a State contract or as recompense for not having bid on a State contract is guilty of a Class 4 felony. Any person who accepts any money or other valuable thing for not bidding for a State contract or who withholds a bid in consideration of the promise for the payment of money or other valuable thing is guilty of a Class 4 felony.

2. The bidder assures the Department that the award and execution of the contract would not cause a violation of Section 50-25, and that the bidder has no knowledge of any facts relevant to the kinds of acts prohibited therein.

### **F. Revolving Door Prohibition**

1. The Illinois Procurement Code provides:

Section 50-30. Revolving door prohibition. Chief procurement officers, associate procurement officers, State purchasing officers, their designees whose principal duties are directly related to State procurement, and executive officers confirmed by the Senate are expressly prohibited for a period of 2 years after terminating an affected position from engaging in any procurement activity relating to the State agency most recently employing them in an affected position for a period of at least 6 months. The prohibition includes, but is not limited to: lobbying the procurement process; specifying; bidding; proposing bid, proposal, or contract documents; on their own behalf or on behalf of any firm, partnership, association, or corporation. This Section applies only to persons who terminate an affected position on or after January 15, 1999.

2. The bidder assures the Department that the award and execution of the contract would not cause a violation of Section 50-30, and that the bidder has no knowledge of any facts relevant to the kinds of acts prohibited therein.

### **G. Reporting Anticompetitive Practices**

1. The Illinois Procurement Code provides:

Section 50-40. Reporting anticompetitive practices. When, for any reason, any vendor, bidder, contractor, chief procurement officer, State purchasing officer, designee, elected official, or State employee suspects collusion or other anticompetitive practice among any bidders, offerors, contractors, proposers, or employees of the State, a notice of the relevant facts shall be transmitted to the Attorney General and the chief procurement officer.

2. The bidder assures the Department that it has not failed to report any relevant facts concerning the practices addressed in Section 50-40 which may involve the contract for which the bid is submitted.

### **H. Confidentiality**

1. The Illinois Procurement Code provides:

Section 50-45. Confidentiality. Any chief procurement officer, State purchasing officer, designee, or executive officer who willfully uses or allows the use of specifications, competitive bid documents, proprietary competitive information, proposals, contracts, or selection information to compromise the fairness or integrity of the procurement, bidding, or contract process shall be subject to immediate dismissal, regardless of the Personnel code, any contract, or any collective bargaining agreement, and may in addition be subject to criminal prosecution.

2. The bidder assures the Department that it has no knowledge of any fact relevant to the practices addressed in Section 50-45 which may involve the contract for which the bid is submitted.

## RETURN WITH BID

### **I. Insider Information**

1. The Illinois Procurement Act provides:

Section 50-50. Insider information. It is unlawful for any current or former elected or appointed State official or State employee to knowingly use confidential information available only by virtue of that office or employment for actual or anticipated gain for themselves or another person.

2. The bidder assures the Department that it has no knowledge of any facts relevant to the practices addressed in Section 50-50 which may involve the contract for which the bid is submitted.

### **III. CERTIFICATIONS**

**A.** The certifications hereinafter made by the bidder are each a material representation of fact upon which reliance is placed should the Department enter into the contract with the bidder. The Department may terminate the contract if it is later determined that the bidder rendered a false or erroneous certification, and the surety providing the performance bond shall be responsible for completion of the contract.

#### **B. Bribery**

1. The Illinois Procurement Code provides:

Section 50-5. Bribery.

(a) Prohibition. No person or business shall be awarded a contract or subcontract under this Code who:

(1) has been convicted under the laws of Illinois or any other state of bribery or attempting to bribe an officer or employee of the State of Illinois or any other state in that officer's or employee's official capacity; or

(2) has made an admission of guilt of that conduct that is a matter of record but has not been prosecuted for that conduct.

(b) Businesses. No business shall be barred from contracting with any unit of State or local government as a result of a conviction under this Section of any employee or agent of the business if the employee or agent is no longer employed by the business and:

(1) the business has been finally adjudicated not guilty; or

(2) the business demonstrates to the governmental entity with which it seeks to contract, and that entity finds that the commission of the offense was not authorized, requested, commanded, or performed by a director, officer, or high managerial agent on behalf of the business as provided in paragraph (2) of subsection (a) of Section 5-4 of the Criminal Code of 1961.

(c) Conduct on behalf of business. For purposes of this Section, when an official, agent, or employee of a business committed the bribery or attempted bribery on behalf of the business and in accordance with the direction or authorization of a responsible official of the business, the business shall be chargeable with the conduct.

(d) Certification. Every bid submitted to and contract executed by the State shall contain a certification by the contractor that the contractor is not barred from being awarded a contract or subcontract under this Section. A contractor who makes a false statement, material to the certification, commits a Class 3 felony.

2. The bidder certifies that it is not barred from being awarded a contract under Section 50.5.

#### **C. Educational Loan**

1. Section 3 of the Educational Loan Default Act provides:

§ 3. No State agency shall contract with an individual for goods or services if that individual is in default, as defined in Section 2 of this Act, on an educational loan. Any contract used by any State agency shall include a statement certifying that the individual is not in default on an educational loan as provided in this Section.

2. The bidder, if an individual as opposed to a corporation, partnership or other form of business organization, certifies that the bidder is not in default on an educational loan as provided in Section 3 of the Act.

#### **D. Bid-Rigging/Bid Rotating**

1. Section 33E-11 of the Criminal Code of 1961 provides:

§ 33E-11. (a) Every bid submitted to and public contract executed pursuant to such bid by the State or a unit of local government shall contain a certification by the prime contractor that the prime contractor is not barred from contracting with any unit of State or local government as a result of a violation of either Section 33E-3 or 33E-4 of this Article. The State and units of local government shall provide the appropriate forms for such certification.

## RETURN WITH BID

(b) A contractor who makes a false statement, material to the certification, commits a Class 3 felony.

A violation of Section 33E-3 would be represented by a conviction of the crime of bid-rigging which, in addition to Class 3 felony sentencing, provides that any person convicted of this offense or any similar offense of any state or the United States which contains the same elements as this offense shall be barred for 5 years from the date of conviction from contracting with any unit of State or local government. No corporation shall be barred from contracting with any unit of State or local government as a result of a conviction under this Section of any employee or agent of such corporation if the employee so convicted is no longer employed by the corporation and: (1) it has been finally adjudicated not guilty or (2) if it demonstrates to the governmental entity with which it seeks to contract and that entity finds that the commission of the offense was neither authorized, requested, commanded, nor performed by a director, officer or a high managerial agent in behalf of the corporation.

A violation of Section 33E-4 would be represented by a conviction of the crime of bid-rotating which, in addition to Class 2 felony sentencing, provides that any person convicted of this offense or any similar offense of any state or the United States which contains the same elements as this offense shall be permanently barred from contracting with any unit of State or local government. No corporation shall be barred from contracting with any unit of State or local government as a result of a conviction under this Section of any employee or agent of such corporation if the employee so convicted is no longer employed by the corporation and: (1) it has been finally adjudicated not guilty or (2) if it demonstrates to the governmental entity with which it seeks to contract and that entity finds that the commission of the offense was neither authorized, requested, commanded, nor performed by a director, officer or a high managerial agent in behalf of the corporation.

2. The bidder certifies that it is not barred from contracting with the Department by reason of a violation of either Section 33E-3 or Section 33E-4.

### **E. International Anti-Boycott**

1. Section 5 of the International Anti-Boycott Certification Act provides:

§ 5. State contracts. Every contract entered into by the State of Illinois for the manufacture, furnishing, or purchasing of supplies, material, or equipment or for the furnishing of work, labor, or services, in an amount exceeding the threshold for small purchases according to the purchasing laws of this State or \$10,000.00, whichever is less, shall contain certification, as a material condition of the contract, by which the contractor agrees that neither the contractor nor any substantially-owned affiliated company is participating or shall participate in an international boycott in violation of the provisions of the U.S. Export Administration Act of 1979 or the regulations of the U.S. Department of Commerce promulgated under that Act.

2. The bidder makes the certification set forth in Section 5 of the Act.

### **F. Drug Free Workplace**

1. The Illinois "Drug Free Workplace Act" applies to this contract and it is necessary to comply with the provisions of the "Act" if the contractor is a corporation, partnership, or other entity (including a sole proprietorship) which has 25 or more employees.

2. The bidder certifies that if awarded a contract in excess of \$5,000 it will provide a drug free workplace by:

(a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance, including cannabis, is prohibited in the contractor's workplace; specifying the actions that will be taken against employees for violations of such prohibition; and notifying the employee that, as a condition of employment on such contract, the employee shall abide by the terms of the statement, and notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five (5) days after such conviction.

(b) Establishing a drug free awareness program to inform employees about the dangers of drug abuse in the workplace; the contractor's policy of maintaining a drug free workplace; any available drug counseling, rehabilitation, and employee assistance programs; and the penalties that may be imposed upon employees for drug violations.

(c) Providing a copy of the statement required by subparagraph (1) to each employee engaged in the performance of the contract and to post the statement in a prominent place in the workplace.

(d) Notifying the Department within ten (10) days after receiving notice from an employee or otherwise receiving actual notice of the conviction of an employee for a violation of any criminal drug statute occurring in the workplace.

(e) Imposing or requiring, within 30 days after receiving notice from an employee of a conviction or actual notice of such a conviction, an appropriate personnel action, up to and including termination, or the satisfactory participation in a drug abuse assistance or rehabilitation program approved by a federal, state or local health, law enforcement or other appropriate agency.

(f) Assisting employees in selecting a course of action in the event drug counseling, treatment, and rehabilitation is required and indicating that a trained referral team is in place.

(g) Making a good faith effort to continue to maintain a drug free workplace through implementation of the actions and efforts stated in this certification.

**G. Debt Delinquency**

1. The Illinois Procurement Code provides:

Section 50-11 and 50-12. Debt Delinquency.

The contractor or bidder certifies that it, or any affiliate, is not barred from being awarded a contract under 30 ILCS 500. Section 50-11 prohibits a person from entering into a contract with a State agency if it knows or should know that it, or any affiliate, is delinquent in the payment of any debt to the State as defined by the Debt Collection Board. Section 50-12 prohibits a person from entering into a contract with a State agency if it, or any affiliate, has failed to collect and remit Illinois Use Tax on all sales of tangible personal property into the State of Illinois in accordance with the provisions of the Illinois Use Tax Act. The contractor further acknowledges that the contracting State agency may declare the contract void if this certification is false or if the contractor, or any affiliate, is determined to be delinquent in the payment of any debt to the State during the term of the contract.

**H. Sarbanes-Oxley Act of 2002**

1. The Illinois Procurement Code provides:

Section 50-60(c).

The contractor certifies in accordance with 30 ILCS 500/50-10.5 that no officer, director, partner or other managerial agent of the contracting business has been convicted of a felony under the Sarbanes-Oxley Act of 2002 or a Class 3 or Class 2 felony under the Illinois Securities Law of 1953 for a period of five years prior to the date of the bid or contract. The contractor acknowledges that the contracting agency shall declare the contract void if this certification is false.

**I. ADDENDA**

The contractor or bidder certifies that all relevant addenda have been incorporated in to this contract. Failure to do so may cause the bid to be declared unacceptable.

**J. Section 42 of the Environmental Protection Act**

The contractor certifies in accordance with 30 ILCS 500/50-12 that the bidder or contractor is not barred from being awarded a contract under this Section which prohibits the bidding on or entering into contracts with the State of Illinois or a State agency by a person or business found by a court or the Pollution Control Board to have committed a willful or knowing violation of Section 42 of the Environmental Protection Act for a period of five years from the date of the order. The contractor acknowledges that the contracting agency may declare the contract void if this certification is false.

**K. Apprenticeship and Training Certification (Does not apply to federal aid projects)**

In accordance with the provisions of Section 30-22 (6) of the Illinois Procurement Code, the bidder certifies that it is a participant, either as an individual or as part of a group program, in the approved apprenticeship and training programs applicable to each type of work or craft that the bidder will perform with its own forces. The bidder further certifies for work that will be performed by subcontract that each of its subcontractors submitted for approval either (a) is, at the time of such bid, participating in an approved, applicable apprenticeship and training program; or (b) will, prior to commencement of performance of work pursuant to this contract, begin participation in an approved apprenticeship and training program applicable to the work of the subcontract. The Department, at any time before or after award, may require the production of a copy of each applicable Certificate of Registration issued by the United States Department of Labor evidencing such participation by the contractor and any or all of its subcontractors. Applicable apprenticeship and training programs are those that have been approved and registered with the United States Department of Labor. The bidder shall list in the space below, the official name of the program sponsor holding the Certificate of Registration for all of the types of work or crafts in which the bidder is a participant and that will be performed with the bidder's forces. Types of work or craft work that will be subcontracted shall be included and listed as subcontract work. The list shall also indicate any type of work or craft job category that does not have an applicable apprenticeship or training program. **The bidder is responsible for making a complete report and shall make certain that each type of work or craft job category that will be utilized on the project as reported on the Construction Employee Workforce Projection (Form BC-1256) and returned with the bid is accounted for and listed.**

**NA - FEDERAL**

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The requirements of this certification and disclosure are a material part of the contract, and the contractor shall require this certification provision to be included in all approved subcontracts. In order to fulfill this requirement, it shall not be necessary that an applicable program sponsor be currently taking or that it will take applications for apprenticeship, training or employment during the performance of the work of this contract.

## TO BE RETURNED WITH BID

### IV. DISCLOSURES

A. The disclosures hereinafter made by the bidder are each a material representation of fact upon which reliance is placed should the Department enter into the contract with the bidder. The Department may terminate the contract if it is later determined that the bidder rendered a false or erroneous disclosure, and the surety providing the performance bond shall be responsible for completion of the contract.

#### **B. Financial Interests and Conflicts of Interest**

1. Section 50-35 of the Illinois Procurement Code provides that all bids of more than \$10,000 shall be accompanied by disclosure of the financial interests of the bidder. This disclosed information for the successful bidder, will be maintained as public information subject to release by request pursuant to the Freedom of Information Act.

The financial interests to be disclosed shall include ownership or distributive income share that is in excess of 5%, or an amount greater than 60% of the annual salary of the Governor, of the bidding entity or its parent entity, whichever is less, unless the contractor or bidder is a publicly traded entity subject to Federal 10K reporting, in which case it may submit its 10K disclosure in place of the prescribed disclosure. If a bidder is a privately held entity that is exempt from Federal 10K reporting, but has more than 400 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any person or entity holding any ownership share that is in excess of 5%. The disclosure shall include the names, addresses, and dollar or proportionate share of ownership of each person making the disclosure, their instrument of ownership or beneficial relationship, and notice of any potential conflict of interest resulting from the current ownership or beneficial interest of each person making the disclosure having any of the relationships identified in Section 50-35 and on the disclosure form.

In addition, all disclosures shall indicate any other current or pending contracts, proposals, leases, or other ongoing procurement relationships the bidding entity has with any other unit of state government and shall clearly identify the unit and the contract, proposal, lease, or other relationship.

2. Disclosure Forms. Disclosure Form A is attached for use concerning the individuals meeting the above ownership or distributive share requirements. Subject individuals should be covered each by one form. In addition, a second form (Disclosure Form B) provides for the disclosure of current or pending procurement relationships with other (non-IDOT) state agencies. **The forms must be included with each bid or incorporated by reference.**

#### **C. Disclosure Form Instructions**

##### **Form A: For bidders that have previously submitted the information requested in Form A**

The Department has retained the Form A disclosures submitted by all bidders responding to these requirements for the April 24, 1998 or any subsequent letting conducted by the Department. The bidder has the option of submitting the information again or the bidder may sign the following certification statement indicating that the information previously submitted by the bidder is, as of the date of signature, current and accurate. The Certification must be signed and dated by a person who is authorized to execute contracts for the bidding company. Before signing this certification, the bidder should carefully review its prior submissions to ensure the Certification is correct. If the Bidder signs the Certification, the Bidder should proceed to Form B instructions.

### CERTIFICATION STATEMENT

**I have determined that the Form A disclosure information previously submitted is current and accurate, and all forms are hereby incorporated by reference in this bid. Any necessary additional forms or amendments to previously submitted forms are attached to this bid.**

\_\_\_\_\_  
(Bidding Company)

\_\_\_\_\_  
Name of Authorized Representative (type or print)

\_\_\_\_\_  
Title of Authorized Representative (type or print)

\_\_\_\_\_  
Signature of Authorized Representative

\_\_\_\_\_  
Date

**Form A: For bidders who have NOT previously submitted the information requested in Form A**

If the bidder is a publicly traded entity subject to Federal 10K reporting, the 10K Report may be submitted to meet the requirements of Form A. If a bidder is a privately held entity that is exempt from Federal 10K reporting, but has more than 400 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any person or entity holding any ownership share that is in excess of 5%. If a bidder is not subject to Federal 10K reporting, the bidder must determine if any individuals are required by law to complete a financial disclosure form. To do this, the bidder should answer each of the following questions. A "YES" answer indicates Form A must be completed. If the answer to each of the following questions is "NO", then the NOT APPLICABLE STATEMENT on the second page of Form A must be signed and dated by a person that is authorized to execute contracts for the bidding company. Note: These questions are for assistance only and are not required to be completed.

1. Does anyone in your organization have a direct or beneficial ownership share of greater than 5% of the bidding entity or parent entity? YES \_\_\_ NO \_\_\_
2. Does anyone in your organization have a direct or beneficial ownership share of less than 5%, but which has a value greater than \$90,420.00? YES \_\_\_ NO \_\_\_
3. Does anyone in your organization receive more than \$90,420.00 of the bidding entity's or parent entity's distributive income? (Note: Distributive income is, for these purposes, any type of distribution of profits. An annual salary is not distributive income.) YES \_\_\_ NO \_\_\_
4. Does anyone in your organization receive greater than 5% of the bidding entity's or parent entity's total distributive income, but which is less than \$90,420.00? YES \_\_\_ NO \_\_\_  
(Note: Only one set of forms needs to be completed per person per bid even if a specific individual would require a yes answer to more than one question.)

A "YES" answer to any of these questions requires the completion of Form A. The bidder must determine each individual in the bidding entity or the bidding entity's parent company that would cause the questions to be answered "Yes". Each form must be signed and dated by a person that is authorized to execute contracts for your organization. **Photocopied or stamped signatures are not acceptable.** The person signing can be, but does not have to be, the person for which the form is being completed. The bidder is responsible for the accuracy of any information provided.

If the answer to each of the above questions is "NO", then the NOT APPLICABLE STATEMENT on page 2 of Form A must be signed and dated by a person that is authorized to execute contracts for your company.

**Form B: Identifying Other Contracts & Procurement Related Information** Disclosure Form B must be completed for each bid submitted by the bidding entity. It must be signed by an individual who is authorized to execute contracts for the bidding entity. *Note: Signing the NOT APPLICABLE STATEMENT on Form A does not allow the bidder to ignore Form B. Form B must be completed, signed and dated or the bidder may be considered nonresponsive and the bid will not be accepted.*

The Bidder shall identify, by checking Yes or No on Form B, whether it has any pending contracts (including leases), bids, proposals, or other ongoing procurement relationship with any other (non-IDOT) State of Illinois agency. If "No" is checked, the bidder only needs to complete the signature box on the bottom of Form B. If "Yes" is checked, the bidder must do one of the following:

Option I: If the bidder did not submit an Affidavit of Availability to obtain authorization to bid, the bidder must list all non-IDOT State of Illinois agency pending contracts, leases, bids, proposals, and other ongoing procurement relationships. These items may be listed on Form B or on an attached sheet(s). Do not include IDOT contracts. Contracts with cities, counties, villages, etc. are not considered State of Illinois agency contracts and are not to be included. Contracts with other State of Illinois agencies such as the Department of Natural Resources or the Capital Development Board must be included. Bidders who submit Affidavits of Availability are suggested to use Option II.

Option II: If the bidder is required and has submitted an Affidavit of Availability in order to obtain authorization to bid, the bidder may write or type "See Affidavit of Availability" which indicates that the Affidavit of Availability is incorporated by reference and includes all non-IDOT State of Illinois agency pending contracts, leases, bids, proposals, and other ongoing procurement relationships. For any contracts that are not covered by the Affidavit of Availability, the bidder must identify them on Form B or on an attached sheet(s). These might be such things as leases.

**D. Bidders Submitting More Than One Bid**

Bidders submitting multiple bids may submit one set of forms consisting of all required Form A disclosures and one Form B for use with all bids. Please indicate in the space provided below the bid item that contains the original disclosure forms and the bid items which incorporate the forms by reference.

- The bid submitted for letting item \_\_\_\_\_ contains the Form A disclosures or Certification Statement and the Form B disclosures. The following letting items incorporate the said forms by reference:

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RETURN WITH BID/OFFER

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form A Financial Information & Potential Conflicts of Interest Disclosure

Contractor Name
Legal Address
City, State, Zip
Telephone Number Email Address Fax Number (if available)

Disclosure of the information contained in this Form is required by the Section 50-35 of the Illinois Procurement Code (30 ILCS 500). Vendors desiring to enter into a contract with the State of Illinois must disclose the financial information and potential conflict of interest information as specified in this Disclosure Form. This information shall become part of the publicly available contract file. This Form A must be completed for bids in excess of \$10,000, and for all open-ended contracts. A publicly traded company may submit a 10K disclosure (or equivalent if applicable) in satisfaction of the requirements set forth in Form A. See Disclosure Form Instructions.

DISCLOSURE OF FINANCIAL INFORMATION

1. Disclosure of Financial Information. The individual named below has an interest in the BIDDER (or its parent) in terms of ownership or distributive income share in excess of 5%, or an interest which has a value of more than \$90,420.00 (60% of the Governor's salary as of 7/1/01). (Make copies of this form as necessary and attach a separate Disclosure Form A for each individual meeting these requirements)

FOR INDIVIDUAL (type or print information)

NAME:

ADDRESS

Type of ownership/distributable income share:

stock sole proprietorship Partnership other: (explain on separate sheet):
% or \$ value of ownership/distributable income share:

2. Disclosure of Potential Conflicts of Interest. Check "Yes" or "No" to indicate which, if any, of the following potential conflict of interest relationships apply. If the answer to any question is "Yes", please attach additional pages and describe.

(a) State employment, currently or in the previous 3 years, including contractual employment of services.

Yes \_\_\_ No \_\_\_

If your answer is yes, please answer each of the following questions.

- 1. Are you currently an officer or employee of either the Capitol Development Board or the Illinois Toll Highway Authority? Yes \_\_\_ No \_\_\_
2. Are you currently appointed to or employed by any agency of the State of Illinois? If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds \$90,420.00, (60% of the Governor's salary as of 7/1/01) provide the name the State agency for which you are employed and your annual salary.

**RETURN WITH BID/OFFER**

- 3. If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds \$90,420.00, (60% of the Governor's salary as of 7/1/01) are you entitled to receive (i) more than 7 1/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of the salary of the Governor? Yes \_\_\_ No \_\_\_
  
- 4. If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds \$90,420.00, (60% of the Governor's salary as of 7/1/01) are you and your spouse or minor children entitled to receive (i) more than 15% in aggregate of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of 2 times the salary of the Governor? Yes \_\_\_ No \_\_\_

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(b) State employment of spouse, father, mother, son, or daughter, including contractual employment for services in the previous 2 years.

Yes \_\_\_ No \_\_\_

If your answer is yes, please answer each of the following questions.

- 1. Is your spouse or any minor children currently an officer or employee of the Capitol Development Board or the Illinois Toll Highway Authority? Yes \_\_\_ No \_\_\_
  
- 2. Is your spouse or any minor children currently appointed to or employed by any agency of the State of Illinois? If your spouse or minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds \$90,420.00, (60% of the Governor's salary as of 7/1/01) provide the name of the spouse and/or minor children, the name of the State agency for which he/she is employed and his/her annual salary. \_\_\_\_\_

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3. If your spouse or any minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds \$90,420.00, (60% of the salary of the Governor as of 7/1/01) are you entitled to receive (i) more than 7 1/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of the salary of the Governor? Yes \_\_\_ No \_\_\_

4. If your spouse or any minor children are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds \$90,420.00, (60% of the Governor's salary as of 7/1/01) are you and your spouse or any minor children entitled to receive (i) more than 15% in the aggregate of the total distributable income from your firm, partnership, association or corporation, or (ii) an amount in excess of 2 times the salary of the Governor?

Yes \_\_\_ No \_\_\_

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(c) Elective status; the holding of elective office of the State of Illinois, the government of the United States, any unit of local government authorized by the Constitution of the State of Illinois or the statutes of the State of Illinois currently or in the previous 3 years.

Yes \_\_\_ No \_\_\_

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(d) Relationship to anyone holding elective office currently or in the previous 2 years; spouse, father, mother, son, or daughter.

Yes \_\_\_ No \_\_\_

---

(e) Appointive office; the holding of any appointive government office of the State of Illinois, the United State of America, or any unit of local government authorized by the Constitution of the State of Illinois or the statutes of the State of Illinois, which office entitles the holder to compensation in excess of the expenses incurred in the discharge of that office currently or in the previous 3 years.

Yes \_\_\_ No \_\_\_

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(f) Relationship to anyone holding appointive office currently or in the previous 2 years; spouse, father, mother, son, or daughter.

Yes \_\_\_ No \_\_\_

---

(g) Employment, currently or in the previous 3 years, as or by any registered lobbyist of the State government.

Yes \_\_\_ No \_\_\_



**RETURN WITH BID/OFFER**

(h) Relationship to anyone who is or was a registered lobbyist in the previous 2 years; spouse, father, mother, son, or daughter. Yes \_\_\_ No \_\_\_

(i) Compensated employment, currently or in the previous 3 years, by any registered election or reelection committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections. Yes \_\_\_ No \_\_\_

(j) Relationship to anyone; spouse, father, mother, son, or daughter; who was a compensated employee in the last 2 years by any registered election or re-election committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections. Yes \_\_\_ No \_\_\_

**APPLICABLE STATEMENT**

**This Disclosure Form A is submitted on behalf of the INDIVIDUAL named on previous page.**

Completed by: \_\_\_\_\_  
Name of Authorized Representative (type or print)

Completed by: \_\_\_\_\_  
Title of Authorized Representative (type or print)

Completed by: \_\_\_\_\_ Date \_\_\_\_\_  
Signature of Individual or Authorized Representative

**NOT APPLICABLE STATEMENT**

**I have determined that no individuals associated with this organization meet the criteria that would require the completion of this Form A.**

**This Disclosure Form A is submitted on behalf of the CONTRACTOR listed on the previous page.**

\_\_\_\_\_  
Name of Authorized Representative (type or print)

\_\_\_\_\_  
Title of Authorized Representative (type or print)

\_\_\_\_\_  
Signature of Authorized Representative Date \_\_\_\_\_

RETURN WITH BID/OFFER

**ILLINOIS DEPARTMENT  
OF TRANSPORTATION**

**Form B  
Other Contracts &  
Procurement Related Information  
Disclosure**

|                  |               |                           |
|------------------|---------------|---------------------------|
| Contractor Name  |               |                           |
| Legal Address    |               |                           |
| City, State, Zip |               |                           |
| Telephone Number | Email Address | Fax Number (if available) |

Disclosure of the information contained in this Form is required by the Section 50-35 of the Illinois Procurement Act (30 ILCS 500). This information shall become part of the publicly available contract file. This Form B must be completed for bids in excess of \$10,000, and for all open-ended contracts.

**DISCLOSURE OF OTHER CONTRACTS AND PROCUREMENT RELATED INFORMATION**

**1. Identifying Other Contracts & Procurement Related Information.** The BIDDER shall identify whether it has any pending contracts (including leases), bids, proposals, or other ongoing procurement relationship with any other State of Illinois agency: Yes \_\_\_ No \_\_\_

If "No" is checked, the bidder only needs to complete the signature box on the bottom of this page.

**2. If "Yes" is checked.** Identify each such relationship by showing State of Illinois agency name and other descriptive information such as bid or project number (attach additional pages as necessary). SEE DISCLOSURE FORM INSTRUCTIONS:

**THE FOLLOWING STATEMENT MUST BE SIGNED**

|  |       |
|--|-------|
| _____  |       |
| Name of Authorized Representative (type or print)  |       |
| _____  |       |
| Title of Authorized Representative (type or print) |       |
| _____  | _____ |
| Signature of Authorized Representative             | Date  |

## **RETURN WITH BID**

### **SPECIAL NOTICE TO CONTRACTORS**

The following requirements of the Illinois Department of Human Rights' Rules and Regulations are applicable to bidders on all construction contracts advertised by the Illinois Department of Transportation:

#### **CONSTRUCTION EMPLOYEE UTILIZATION PROJECTION**

- (a) All bidders on construction contracts shall complete and submit, along with and as part of their bids, a Bidder's Employee Utilization Form (Form BC-1256) setting forth a projection and breakdown of the total workforce intended to be hired and/or allocated to such contract work by the bidder including a projection of minority and female employee utilization in all job classifications on the contract project.
- (b) The Department of Transportation shall review the Employee Utilization Form, and workforce projections contained therein, of the contract awardee to determine if such projections reflect an underutilization of minority persons and/or women in any job classification in accordance with the Equal Employment Opportunity Clause and Section 7.2 of the Illinois Department of Human Rights' Rules and Regulations for Public Contracts adopted as amended on September 17, 1980. If it is determined that the contract awardee's projections reflect an underutilization of minority persons and/or women in any job classification, it shall be advised in writing of the manner in which it is underutilizing and such awardee shall be considered to be in breach of the contract unless, prior to commencement of work on the contract project, it submits revised satisfactory projections or an acceptable written affirmative action plan to correct such underutilization including a specific timetable geared to the completion stages of the contract.
- (c) The Department of Transportation shall provide to the Department of Human Rights a copy of the contract awardee's Employee Utilization Form, a copy of any required written affirmative action plan, and any written correspondence related thereto. The Department of Human Rights may review and revise any action taken by the Department of Transportation with respect to these requirements.



**RETURN WITH BID**

**Contract No. 68205  
MCDONOUGH County  
Section 55-2  
Project NHF-315(46)  
Route FAP 315  
District 4 Construction Funds**

**PART II. WORKFORCE PROJECTION - continued**

- B. Included in "Total Employees" under Table A is the total number of **new hires** that would be employed in the event the undersigned bidder is awarded this contract.

The undersigned bidder projects that: (number) \_\_\_\_\_ new hires would be recruited from the area in which the contract project is located; and/or (number) \_\_\_\_\_ new hires would be recruited from the area in which the bidder's principal office or base of operation is located.

- C. Included in "Total Employees" under Table A is a projection of numbers of persons to be employed directly by the undersigned bidder as well as a projection of numbers of persons to be employed by subcontractors.

The undersigned bidder estimates that (number) \_\_\_\_\_ persons will be directly employed by the prime contractor and that (number) \_\_\_\_\_ persons will be employed by subcontractors.

**PART III. AFFIRMATIVE ACTION PLAN**

- A. The undersigned bidder understands and agrees that in the event the foregoing minority and female employee utilization projection included under **PART II** is determined to be an underutilization of minority persons or women in any job category, and in the event that the undersigned bidder is awarded this contract, he/she will, prior to commencement of work, develop and submit a written Affirmative Action Plan including a specific timetable (geared to the completion stages of the contract) whereby deficiencies in minority and/or female employee utilization are corrected. Such Affirmative Action Plan will be subject to approval by the contracting agency and the **Department of Human Rights**.
- B. The undersigned bidder understands and agrees that the minority and female employee utilization projection submitted herein, and the goals and timetable included under an Affirmative Action Plan if required, are deemed to be part of the contract specifications.

Company \_\_\_\_\_ Telephone Number \_\_\_\_\_

Address \_\_\_\_\_

**NOTICE REGARDING SIGNATURE**

The Bidder's signature on the Proposal Signature Sheet will constitute the signing of this form. The following signature block needs to be completed only if revisions are required.

Signature: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_

Instructions: All tables must include subcontractor personnel in addition to prime contractor personnel.

Table A - Include both the number of employees that would be hired to perform the contract work and the total number currently employed (Table B) that will be allocated to contract work, and include all apprentices and on-the-job trainees. The "Total Employees" column should include all employees including all minorities, apprentices and on-the-job trainees to be employed on the contract work.

Table B - Include all employees currently employed that will be allocated to the contract work including any apprentices and on-the-job trainees currently employed.

Table C - Indicate the racial breakdown of the total apprentices and on-the-job trainees shown in Table A.

**RETURN WITH BID**

**ADDITIONAL FEDERAL REQUIREMENTS**

In addition to the Required Contract Provisions for Federal-Aid Construction Contracts (FHWA 1273), all bidders make the following certifications.

- A. By the execution of this proposal, the signing bidder certifies that the bidding entity has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action, in restraint of free competitive bidding in connection with the submitted bid. This statement made by the undersigned bidder is true and correct under penalty of perjury under the laws of the United States.
- B. CERTIFICATION, EQUAL EMPLOYMENT OPPORTUNITY:
1. Have you participated in any previous contracts or subcontracts subject to the equal opportunity clause. YES \_\_\_\_\_ NO \_\_\_\_\_
  2. If answer to #1 is yes, have you filed with the Joint Reporting Committee, the Director of OFCC, any Federal agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements of those organizations? YES \_\_\_\_\_ NO \_\_\_\_\_

**RETURN WITH BID**

**Contract No. 68205  
MCDONOUGH County  
Section 55-2  
Project NHF-315(46)  
Route FAP 315  
District 4 Construction Funds**

PROPOSAL SIGNATURE SHEET

The undersigned bidder hereby makes and submits this bid on the subject Proposal, thereby assuring the Department that all requirements of the Invitation for Bids and rules of the Department have been met, that there is no misunderstanding of the requirements of paragraph 3 of this Proposal, and that the contract will be executed in accordance with the rules of the Department if an award is made on this bid.

(IF AN INDIVIDUAL) Firm Name \_\_\_\_\_  
Signature of Owner \_\_\_\_\_  
Business Address \_\_\_\_\_  
\_\_\_\_\_

(IF A CO-PARTNERSHIP) Firm Name \_\_\_\_\_  
By \_\_\_\_\_  
Business Address \_\_\_\_\_  
Name and Address of All Members of the Firm: \_\_\_\_\_  
\_\_\_\_\_

(IF A CORPORATION) Corporate Name \_\_\_\_\_  
By \_\_\_\_\_  
Signature of Authorized Representative \_\_\_\_\_  
Typed or printed name and title of Authorized Representative \_\_\_\_\_

(IF A JOINT VENTURE, USE THIS SECTION FOR THE MANAGING PARTY AND THE SECOND PARTY SHOULD SIGN BELOW) Attest \_\_\_\_\_  
Signature \_\_\_\_\_  
Business Address \_\_\_\_\_

(IF A JOINT VENTURE) Corporate Name \_\_\_\_\_  
By \_\_\_\_\_  
Signature of Authorized Representative \_\_\_\_\_  
Typed or printed name and title of Authorized Representative \_\_\_\_\_

Attest \_\_\_\_\_  
Signature \_\_\_\_\_  
Business Address \_\_\_\_\_

If more than two parties are in the joint venture, please attach an additional signature sheet.

RETURN WITH BID



Division of Highways
Proposal Bid Bond
(Effective November 1, 1992)

Item No.
Letting Date

KNOW ALL MEN BY THESE PRESENTS, That We

as PRINCIPAL, and

as SURETY, are held jointly, severally and firmly bound unto the STATE OF ILLINOIS in the penal sum of 5 percent of the total bid price, or for the amount specified in Article 102.09 of the "Standard Specifications for Road and Bridge Construction" in effect on the date of invitation for bids, whichever is the lesser sum, well and truly to be paid unto said STATE OF ILLINOIS, for the payment of which we bind ourselves, our heirs, executors, administrators, successors and assigns.

THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH, That Whereas, the PRINCIPAL has submitted a bid proposal to the STATE OF ILLINOIS, acting through the Department of Transportation, for the improvement designated by the Transportation Bulletin Item Number and Letting Date indicated above.

NOW, THEREFORE, if the Department shall accept the bid proposal of the PRINCIPAL; and if the PRINCIPAL shall, within the time and as specified in the bidding and contract documents, submit a DBE Utilization Plan that is accepted and approved by the Department; and if, after award by the Department, the PRINCIPAL shall enter into a contract in accordance with the terms of the bidding and contract documents including evidence of the required insurance coverages and providing such bond as specified with good and sufficient surety for the faithful performance of such contract and for the prompt payment of labor and material furnished in the prosecution thereof; or if, in the event of the failure of the PRINCIPAL to make the required DBE submission or to enter into such contract and to give the specified bond, the PRINCIPAL pays to the Department the difference not to exceed the penalty hereof between the amount specified in the bid proposal and such larger amount for which the Department may contract with another party to perform the work covered by said bid proposal, then this obligation shall be null and void, otherwise, it shall remain in full force and effect.

IN THE EVENT the Department determines the PRINCIPAL has failed to comply with any requirement as set forth in the preceding paragraph, then Surety shall pay the penal sum to the Department within fifteen (15) days of written demand therefor. If Surety does not make full payment within such period of time, the Department may bring an action to collect the amount owed. Surety is liable to the Department for all its expenses, including attorney's fees, incurred in any litigation in which it prevails either in whole or in part.

In TESTIMONY WHEREOF, the said PRINCIPAL and the said SURETY have caused this instrument to be signed by their respective officers this day of A.D.,

PRINCIPAL SURETY
(Company Name)
By: (Signature & Title) By: (Signature of Attorney-in-Fact)

Notary Certification for Principal and Surety

STATE OF ILLINOIS,
COUNTY OF

I, a Notary Public in and for said County, do hereby certify that and

(Insert names of individuals signing on behalf of PRINCIPAL & SURETY)

who are each personally known to me to be the same persons whose names are subscribed to the foregoing instrument on behalf of PRINCIPAL and SURETY, appeared before me this day in person and acknowledged respectively, that they signed and delivered said instrument as their free and voluntary act for the uses and purposes therein set forth.

Given under my hand and notarial seal this day of, A.D.

My commission expires Notary Public

In lieu of completing the above section of the Proposal Bid Form, the Principal may file an Electronic Bid Bond. By signing below the Principal is ensuring the identified electronic bid bond has been executed and the Principal and Surety are firmly bound unto the State of Illinois under the conditions of the bid bond as shown above.

Electronic Bid Bond ID# Company/Bidder Name Signature and Title



# PROPOSAL ENVELOPE



## PROPOSALS

for construction work advertised for bids by the Illinois Department of Transportation

| Item No. | Item No. | Item No. |
|----------|----------|----------|
|          |          |          |
|          |          |          |
|          |          |          |
|          |          |          |

Submitted By:

|           |
|-----------|
| Name:     |
| Address:  |
|           |
|           |
| Phone No. |

Bidders should use an IDOT proposal envelope or affix this form to the front of a 10" x 13" envelope for the submittal of bids. If proposals are mailed, they should be enclosed in a second or outer envelope addressed to:

Engineer of Design and Environment - Room 326  
Illinois Department of Transportation  
2300 South Dirksen Parkway  
Springfield, Illinois 62764

### **NOTICE**

**Individual bids, including Bid Bond and/or supplemental information if required, should be securely stapled.**

# CONTRACTOR OFFICE COPY OF CONTRACT SPECIFICATIONS

## NOTICE

None of the following material needs to be returned with the bid package unless the special provisions require documentation and/or other information to be submitted.

**Contract No. 68205  
MCDONOUGH County  
Section 55-2  
Project NHF-315(46)  
Route FAP 315  
District 4 Construction Funds**



**Illinois Department of Transportation**



## NOTICE TO BIDDERS

- 1. TIME AND PLACE OF OPENING BIDS.** Sealed proposals for the improvement described herein will be received by the Department of Transportation at the Harry R. Hanley Building, 2300 South Dirksen Parkway, in Springfield, Illinois until 10:00 o'clock a.m., June 16, 2006. All bids will be gathered, sorted, publicly opened and read in the auditorium at the Department of Transportation's Harry R. Hanley Building shortly after the 10:00 a.m. cut off time.
- 2. DESCRIPTION OF WORK.** The proposed improvement is identified and advertised for bids in the Invitation for Bids as:

**Contract No. 68205  
MCDONOUGH County  
Section 55-2  
Project NHF-315(46)  
Route FAP 315  
District 4 Construction Funds**

**This project consists of constructing 8.13 miles of four lane expressway for proposed IL Route 336 located 1.7 miles east of IL Route 61 to U.S. Route 136 east of Township Road 226 near Macomb.**

- 3. INSTRUCTIONS TO BIDDERS.** (a) This Notice, the invitation for bids, proposal and letter of award shall, together with all other documents in accordance with Article 101.09 of the Standard Specifications for Road and Bridge Construction, become part of the contract. Bidders are cautioned to read and examine carefully all documents, to make all required inspections, and to inquire or seek explanation of the same prior to submission of a bid.  
  
(b) State law, and, if the work is to be paid wholly or in part with Federal-aid funds, Federal law requires the bidder to make various certifications as a part of the proposal and contract. By execution and submission of the proposal, the bidder makes the certification contained therein. A false or fraudulent certification shall, in addition to all other remedies provided by law, be a breach of contract and may result in termination of the contract.
- 4. AWARD CRITERIA AND REJECTION OF BIDS.** This contract will be awarded to the lowest responsive and responsible bidder considering conformity with the terms and conditions established by the Department in the rules, Invitation for Bids and contract documents. The issuance of plans and proposal forms for bidding based upon a prequalification rating shall not be the sole determinant of responsibility. The Department reserves the right to determine responsibility at the time of award, to reject any or all proposals, to readvertise the proposed improvement, and to waive technicalities.

By Order of the  
Illinois Department of Transportation

Timothy W. Martin, Secretary

BD 351 (Rev. 01/2003)

INDEX  
FOR  
SUPPLEMENTAL SPECIFICATIONS  
AND RECURRING SPECIAL PROVISIONS

Adopted March 1, 2005

This index contains a listing of SUPPLEMENTAL SPECIFICATIONS and frequently used RECURRING SPECIAL PROVISIONS.

ERRATA Standard Specifications for Road and Bridge Construction (Adopted 1-1-02) (Revised 3-1-05)

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## STATE OF ILLINOIS

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### SPECIAL PROVISIONS

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction," adopted January 1, 2002, the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways," and the "Manual of Test Procedures for Materials" in effect on the date of invitation for bids, and the Supplemental Specifications and Recurring Special Provisions indicated on the Check Sheet included herein which apply to and govern the construction of FAP Route 315 (IL 336), Section 55-2, Project NHF-0315(046) in McDonough County and in case of conflict with any part or parts of said Specifications, the said Special Provisions shall take precedence and shall govern.

#### LOCATION OF PROJECT

This project is located 1.7 miles east of Illinois Route 61 to US Route 136 east of Township Road 226 in McDonough County.

#### DESCRIPTION OF PROJECT

This project consists of the construction of 8.13 miles of a four-lane expressway for proposed Illinois Route 336.

#### DATE OF COMPLETION

Effective March 1, 1990

The Contractor shall schedule his operations so as to complete all work and open all the roadway to traffic on or before October 1, 2008. The Contractor shall note that this completion date is based on an expedited work schedule.

#### REMOVAL OF ABANDONED UNDERGROUND UTILITIES

Effective January 15, 1996      Revised November 21, 1996

This work shall be completed in accordance with Article 105.07 of the Standard Specifications and the items outlined herein:

The cost of removal of abandoned or to be abandoned underground utilities shown on the plans are the responsibility of the owner. The Contractor shall make arrangements with the utility owner for removal and payment. The utility owner is listed in the plans under Status of Utilities.

Prior to removal of the abandoned facility, the owner shall be notified so that representatives can be present during the removal operation.

If an unknown abandoned utility is encountered, the Contractor will be paid for any removal required by the Engineer as extra work in accordance with Article 109.04 of the Standard Specifications.

## **NATIONWIDE 404 PERMIT REQUIREMENTS**

Effective January 22, 2001    Revised August 2, 2002

This bridge replacement or rehabilitation included with this project is authorized under a Nationwide Permit, provided all terms and conditions of the Nationwide Permit and any special conditions outlined in the Corps of Engineers' verification letter are met. A copy of the permit should be included within these special provisions. If they are not, a copy of these can be requested from the Department.

The Contractor will not be allowed to complete the structure replacement or rehabilitation using any in-stream access fill, cofferdams, or causeways unless shown on the plans or unless the proper permits are acquired by the Contractor for these activities. The existing permit may be amended to include these activities once the contractor determines the plan for completion of the work and it is submitted to the Department for submission to the Corps of Engineers'. The Department will not be held responsible for any delays incurred due to acquisition of additional permits or amending the existing permit. Determination of allowable methods for completion of this work under the current permit can be obtained from the Corps of Engineers.

## **BORROW AND FURNISHED EXCAVATION**

Effective March 7, 2000    Revised October 15, 2001

Add the following to the requirements of Article 204:

"Soils which demonstrate the following properties shall be restricted to the interior of the embankment and shall be covered on both sides and top with a minimum of 900mm (3 feet) of non-restricted soil not considered detrimental in terms of erosion potential or excess volume change. A restricted soil is defined as having any one of the following properties:"

- A grain size distribution with less than 35% passing the number 75um (#200) sieve.
- A plasticity index of less than 12.
- A liquid limit in excess of 50.

“All restricted and non-restricted embankment materials shall have the following minimum strengths for the indicated moistures:”

| <b>Immediate Bearing Value</b> | <b>Shear Strength At 95% Density*</b> | <b>Moisture</b> |
|--------------------------------|---------------------------------------|-----------------|
| 3.0                            | 50 Kpa (1000 PSF)                     | 120%            |
| 4.0                            | 62 Kpa (1300 PSF)                     | 110%            |

\*Granular Soils  $\phi=35^\circ$

**EMBANKMENT (RESTRICTIONS)**

Effective January 21, 2005

Add the following to the requirements of Article 205.04(a):

Gravel, crushed stone or soils having less than 35% passing the number 200 sieve and other materials as allowed by Article 202.03 of the standard specifications are further restricted. These further restricted materials are also limited to the interior of the embankment and shall have a minimum cover of 1 m (3') of non-restricted soil (see “Borrow and Furnished Excavation” Special Provision). Alternating layers of further restricted material and cohesive soil will not be permitted. The further restricted materials may only be incorporated into the embankment by using one of the following procedures:

- a. The further restricted materials shall be placed in 4” lifts and disked with the underlying lift material until a uniform and homogenous material is formed having more than 35% passing the number 200 sieve.
- b. Sand, gravel or crushed stone embankment when placed on the existing ground surface will be drained using a 3 m (10') by 3m (10') french drain consisting of nonwoven geotechnical fabric with 0.3 m (12”) of B-3 riprap. This shall be constructed on both sides of the embankment at the toe of the foreslope spaced 46 m (150') apart. At locations requiring a French drain the 1m (3') cohesive cap shall not be installed within the 3m by 3m riprap area. If the Engineer determines that the existing ground is a granular free draining soil, the french drain may be deleted.
- c. Sand, gravel or crushed stone embankment when placed on top of a cohesive embankment will be drained with a permanent 100 mm (4”) underdrain system. The underdrain system shall consist of a longitudinal underdrain on both sides of the embankment and transverse underdrains spaced at 75 m (250') centers. The underdrain shall consist of a 0.6 m (2') deep by 0.3 m (1') wide trench, backfilled with FA4 sand and a 100 mm (4”) diameter underdrain. In addition, both sides of the embankment will have a 150 mm (6”) diameter pipe drain which will drain the underdrain system and outletted into a permanent drainage structure or outletted by a headwall at the toe of the embankment.

The above work will not be paid for separately but shall be included in the cost of Earth Excavation, Furnished Excavation, or Borrow Excavation.

**EMBANKMENT**

Effective: July 1, 1990

Revised: January 22, 2002

Revise the third paragraph of Article 205.05 of the Standard Specifications to read:

All embankment shall be constructed with not more than 110% of optimum moisture content, determined according to AASHTO T 99 (Method C). The 110% of optimum moisture limit may be waived in free draining granular material when approved by the Engineer.

The Contractor may, at his option, add a drying agent to lower the moisture content as specified above. The drying agent must be approved by the Engineer prior to use. Extra compensation will not be allowed for the use of a drying agent but will be considered included in the cost of the various items of excavation.

**SEEDLING MIXTURE A**

Effective May 5, 2000

This work shall consist of planting replacement seedling trees at the locations specified in the plans and in accordance with Article 253 of the Standard Specifications. Seedlings shall consist of an equal distribution of the following five species:

Red Maple  
Northern Red Oak  
Redbud  
White Oak  
Washington Hawthorn

This work will be paid for at the contract unit price per unit for SEEDLINGS MIXTURE A.

**AGGREGATE DITCH**

Effective April 15, 1991

Revised October 15, 2001

This work shall be performed in accordance with Article 283.03 except the aggregate shall meet "B" quality per Article 1005.01 and that the sodium sulfate loss shall not exceed 35%.

Stone for AGGREGATE DITCH shall meet gradation requirements as shown in Article 1005.01 (C) Gradation 3.

**PROOF ROLLING**

Effective April 23, 2004

This work shall consist of proof rolling the embankment with a fully loaded tandem axle dump truck and driver at the direction of the Engineer. The truck shall travel the sub-grade in all of the proposed lanes of traffic in the presence of the Engineer.

This work will not be paid for separately, but considered included in the various earthwork pay items.

### **SUBGRADE TREATMENT**

Effective July 1, 1990      Revised April 26, 2006

Delete the third paragraph (including subparagraphs a, b, and c) of Article 301.03 of the Standard Specifications and replace it with the following:

In cut sections the contractor responsible for the rough grading shall obtain not less than 95% of the standard laboratory density and not more than 110% of the optimum moisture for the top 300mm (1 ft.) of the subgrade.

The Contractor may, at his/her option, add a drying agent to lower the moisture content as specified. The drying agent must be approved by the Engineer prior to use. Additional compensation will not be allowed for the use of a drying agent, but will be considered as included in the cost of the various earthwork items.

In the first sentence of the fourth paragraph delete "listed in the steps."

### **LIME MODIFIED SOILS**

Effective July 1, 1990      Revised July 1, 1994

This work shall consist of the construction of a lime-modified soil layer as described in Section 302 of the Standard Specifications, except as modified herein.

Revise Article 302.04 by deletion of the last sentence and adding:

The depth of treatment shall be based on proof rolling and soil strength (cone index). Proof rolling shall consist of running a loaded tandem truck over the sub-grade.

Revise Article 302.07 by deletion of the entire article and substitution of the following:

Mixing. The lime, soil, and water (if necessary) shall be thoroughly blended by rotary speed mixers. The mixing shall continue until it has been determined by the Engineer that a homogeneous layer of the required thickness has been obtained. A disc harrow may be used to supplement the mixing by the rotary mixer.

Add to Article 302.09 Finishing:

After adequate compaction is obtained, no construction equipment will be permitted on the finished sub-grade for a period of 3 days, after which only equipment used for grading prior to placement of paving materials will be permitted.

Prior to placing pavement, the treated sub-grade shall have a minimum in-place CBR value of 11, as determined by a dynamic cone penetrometer furnished by the Contractor for use by the Resident Engineer.

### **RIPRAP, SPECIAL**

This work consists of furnishing and placing a protective layer of crushed stone for erosion protection at the underdrain outlets as shown in the plans. This shall be in accordance with the plan details and applicable portions of Section 281 of the Standard Specifications, except as noted herein.

Material: The aggregate shall meet "B" quality per Article 1005.01 and that the sodium sulfate loss shall not exceed 35%, Gradation CA-1 or CA-2.

Method of Measurement: Riprap will be measured for payment in square yards measured in place.

Basis of Payment: This work will be paid for at the contract unit price per square yard for RIPRAP, SPECIAL.

### **ROCKFILL**

Effective October 15, 1995

Revised October 7, 2005

This work shall consist of furnishing, transporting and placing rockfill for ground stabilization.

The material shall meet Quality Designation "A" as required in Article 1005.01(1) of the Standard Specifications for Road and Bridge Construction and may be shot rock or primary crusher run. It shall not contain objectionable quantities of dirt, sand, clay or rock fines.

The material shall be well graded with a maximum stone dimension of 200 mm (8 inches). No more than 35% shall have a dimension less than 50 mm (2 inches).

Rockfill will be measured for payment in metric tons (tons), in accordance with Article 311.08 except that all references to cubic meter (cubic yard) measurement and payment shall be deleted.

This work will be paid for at the contract unit price per metric ton (ton) for ROCKFILL.

### **ROCKFILL – FOUNDATION**

Effective August 29, 2005

This work shall consist of furnishing, transporting and placing rockfill in areas of unsuitable removal.

The material shall meet Quality Designation #B as required in Article 1005.01 of the Standard Specifications for Road and Bridge Construction and may be shot rock or primary crusher run. It shall not contain objectionable quantities of dirt, sand, clay or rock fines as defined under gabions and slope mattresses, Article 284.02. Rock fill shall be capped with 4 to 6 inches of CA-7. no compaction of rock fill is required for culver applications.

The material shall be well graded with a maximum stone dimension of 8 inches. No more than 35% shall have a dimension less than 2 inches.



Rockfill-Foundation will be measured for payment in cubic yard, in accordance with Article 311.08.

This work will be paid for at the contract unit price per cubic yard for ROCKFILL-FOUNDATION.

### **TEMPORARY PAVEMENT REMOVAL**

This work shall consist of the complete removal, and proper disposal, of the temporary access road for the Gold Hills golf course. This work shall be in compliance with all applicable portions of Section 440 of the Standard Specifications, and these special provisions. Seal coat surface, aggregate and filter fabric are to be completely removed and properly disposed of. Drainage items labeled as temporary, or no longer required, are to be included in the temporary pavement removal. The Contractor shall use proper caution in his removal as not to damage any drainage pipes marked as to remain.

Any disturbed area within the temporary easement for the access road is to be graded and shaped to restore to its original condition in preparation for permanent seeding. Addition or replacement of topsoil shall be as directed by the Engineer. Any ditches that were cut for drainage shall be filled and graded smooth.

This work as described will be measured and paid for at the contract unit price per square yard of pavement removal.

Topsoil will be paid separately as TOPSOIL EXCAVATION AND PLACEMENT measured in cubic yards.

Permanent seeding will be paid for separately.

### **REMOVE EXISTING CULVERTS**

This work shall consist of the removal and proper disposal of existing box culverts at locations and size as shown in the plans. This work shall be done in accordance with applicable portions of Section 501 of the Standard Specifications and these special provisions.

Method of Measurement: The work of removal and disposal will be measured for payment in feet measured along the center line of the culvert, excluding the concrete headwalls.

Basis of Payment: This work shall be paid for at the contract unit price per foot for REMOVE EXISTING CULVERTS.

Removal of concrete headwalls at box culverts will be paid for separately.

### **CONCRETE HEADWALL REMOVAL**

This work shall consist of the removal and proper disposal of concrete headwalls at the existing box culverts at locations and size as shown in the plans. This work shall be done in accordance with applicable portions of Section 501 of the Standard Specifications and these Special Provisions.

Method of Measurement: The work of removal and disposal shall be measured for payment as each.

Basis of Payment: This work shall be paid for at the contract unit price each for CONCRETE HEADWALL REMOVAL.

### **REMOVE CONCRETE FOUNDATION**

This work consists of the removal and proper disposal of concrete foundations at the locations shown in the plans. This work shall be done in compliance with Section 501 of the Standard Specifications. For information only, the estimated square feet of each location is listed below:

#### **IL Route 336**

Station 141+00±, 620 sq. ft.  
Station 287+10±, 152 sq. ft.  
Station 287+20±, 152 sq. ft.  
Station 467+10±, 60 sq. ft.

#### **TR 200 Relocation**

Station 55+00± ±283.5 sq. ft.

This work shall be measured and paid for at the contract unit price each for REMOVE CONCRETE FOUNDATION.

### **PIPE CULVERT REMOVAL**

Removal of concrete headwalls on existing pipe culverts will not be paid for separately. Headwall removal will be measured in feet and included in the measured quantity for PIPE CULVERT REMOVAL.

### **FILLING EXISTING CULVERTS**

This work shall consist of filling existing pipe culverts with controlled Low Strength Material meeting the requirements set forth in Check Sheet #12 of the Recurring Special Provisions.

The culverts to be filled are as follows:

|                         |                    |              |
|-------------------------|--------------------|--------------|
| Station 132+50          | Estimated quantity | 1.1 cu. yd.  |
| Station 137+00          | Estimated quantity | 8.0 cu. yd.  |
| Station 154+11 – 154+33 | Estimated quantity | 19.0 cu. yd. |

The culverts shall be plugged on both ends with a plug material meeting the approval of the Engineer. The plug shall be adequate to withstand the hydrostatic load created during the filling operation. If the plugs fail during the filling operation, the Contractor shall be responsible for the cost of repairing the plugs and filling the remainder of the culvert.

Station 132+50 and Station 137+00; prior to filling the culvert sufficient pipe length shall be removed from each end to provide a minimum of 12" cover at finished grade. This work shall be included in the cost of filling the culvert.

This work, including the cost of plugging the pipe ends and pipe removal as required will be paid for at the contract unit price each for FILLING EXISTING CULVERTS. Each culvert location filled will be paid for separately.

### **SILT CURTAIN REMOVAL**

This work consists of the maintenance of the existing silt curtain and the eventual complete removal and proper disposal of the existing silt curtain.

The silt curtain shall be inspected at regular intervals throughout the project and daily when work is being performed adjacent to the silt curtain. Any required repairs shall be made quickly with materials and method approved by the Engineer.

The silt curtain is to remain in place until all work in the vicinity is completed and all settlement has occurred leaving clean water behind the curtain. When the settlement is complete, the curtain shall be removed. If the Engineer determines that removal of the sediment is required, the removal shall be done prior the silt curtain removal and after settlement from the cleaning operation has occurred. The Contractor shall use care in his removal so as not to disturb the sediment trapped by the curtain and releasing the sediment into the lake.

Method of Measurement: This work shall be measured for payment in square yards of silt curtain removed.

Basis of Payment: The work, as described of inspection, maintaining, repair, removal and disposal shall be paid for at the contract unit price per square yard for SILT CURTAIN REMOVAL.

If required by the Engineer, the work of sediment removal will be paid for per Article 109.04 of the Standard Specifications.

### **TEMPORARY PIPE CULVERTS**

End sections for temporary pipe culvers shall be supplied at the locations shown in the plans. End sections, where required, are included in the plan quantities per foot for the type and size of pipe specified.

### **GRATED END SECTION, SPECIAL**

This work consists of furnishing, placing and the subsequent removal of a temporary precast reinforced flared end section with a grate to serve as a drop box. The drop box shall be as shown in the plan details, 542301-D4.

This work shall be paid for at the contract unit price each for GRATED END SECTION SPECIAL.

### **CONNECTION OF UNDERDRAINS TO DRAINAGE STRUCTURES**

When required, underdrains shall be connected to the proposed drainage structures. The Contractor shall use proper care so as not to damage the drainage structures when cutting holes for the underdrains. The underdrains shall be grouted in place. The method and materials used to cut holes and grout the pipe in place shall be approved by the Engineer.

Pipe underdrains shall be placed a minimum of six (6") inches above the top of the highest pipe in the drainage structures.

This work will not be paid for separately, but shall be included in the contract unit price for the PIPE UNDERDRAINS.

### **PIPE UNDERDRAIN**

Effective: August 1, 2003

Revised: October 24, 2005

This work shall be according to Section 601 of the Standard Specifications and plan details, except as modified herein:

### **BACKFILL FOR UNDERDRAINS OR BEDDING**

FA 4 or FM 4 meeting the following gradations shall be used for backfilling the underdrain trench:

| Sieve Size       | Percent Passing |             |
|------------------|-----------------|-------------|
|                  | <u>FA 4</u>     | <u>FM 4</u> |
| 3/8" (9.5 mm)    | 100             | 100         |
| No. 4 (4.75 mm)  |                 | 97 ± 3      |
| No. 8 (2.36 mm)  |                 | 5 ± 5       |
| No. 10 (2 mm)    | 21% max         |             |
| No. 16 (1.18 mm) | 5 ± 5           | 2 ± 2       |
| No. 200 (75)     | 2% max          | 2% max      |

Only natural sands and gravel shall be used.

**PIPE UNDERDRAIN**

A pipe slot of 1.75 mm± 0.25 mm shall be used. The number of slots and the slot length may be manipulated to maintain the inlet flow specified in AASHTO M 252-96 as long as it does not compromise any other requirements specified in AASHTO 252-96. No fabric envelope for the pipe underdrain or the trench shall be used. The District may conduct a number of Ploog Washer tests, using this pipe with random samples of the backfill material. The loss of fines through the pipe slot in the Ploog Washer tests shall not exceed 4%.

**PIPE UNDERDRAIN, 6" (150MM)**

The pipe underdrains shall be encased in a non woven fabric envelope for pipe underdrains in accordance with Section 1080 of the Standard Specifications. A knitted or woven fabric will not be permitted. If the pipe slot of 1.75 mm± 0.25 mm can be produced in the 6" (150 mm) sized pipe underdrain, the non-woven fabric envelope shall be deleted.

**BITUMINOUS COATED AGGREGATE SLOPEWALL**

Effective: March 21, 1997

This work shall consist of paving embankment slopes with crushed aggregate for control and prevention of erosion of slopes.

Material: The aggregate used for slope wall paving shall be crushed stone conforming to Article 1004.01 of the Standard Specifications for Class D quality, except that one of the following options shall apply:

**COARSE AGGREGATE QUALITY**

| QUALITY TEST   | Option 1 | Option 2 |
|--|----------|----------|
| Na <sub>2</sub> SO <sub>4</sub> Soundness <sup>2/</sup> 5 Cycle,<br>AASHTO T 104 <sup>1/2/</sup> Max. % Loss | 35       | 25       |
| Los Angeles Abrasion AASHTO T 96<br>Max. % Loss  | 45       | 65       |

The aggregate shall be uniformly graded to meet the following.

| <u>Percent Passing</u> | <u>Sieve Size</u> |
|------------------------|-------------------|
| 100%                   | 100 mm (4 inch)   |
| 53 ± 23%               | 50 mm (2 inch)    |
| 8 ± 8%                 | 4.75 mm (No. 4)   |

The bituminous material used for slopewall paving shall be RS-1, RS-2, RC70 or RC250 meeting the requirements of Section 1009 of the Standard Specifications.

Construction Requirements: The surface upon which the slopewall is to be constructed shall conform to the elevation, lines, grades, and cross section indicated on the plans and as directed by the Engineer. The subgrade shall be shaped to ± 25 mm (1 inch) of plan grade.

Prior to placing aggregate, the slope shall be compacted to a uniform density as directed by the Engineer. Excess excavated material shall be disposed of by the Contractor as provided in Section 502 of the Standard Specifications.

The crushed aggregate shall be placed on the prepared slope, shaped and compacted to the satisfaction of the Engineer. Bituminous material shall not be placed until the aggregate has dried to the satisfaction of the Engineer.

Bituminous material shall be applied at a rate sufficient to assure penetration into and the binding together of particles in the upper 50 mm (2 inch) of the crushed aggregate slopewall. The adjacent structure shall be protected from bituminous material to prevent spattering or discoloration.

Basis of Measurement and Payment: This work will be measured in place and the area computed in square meters (square yards) and will be paid for at the contract unit price per square meter (square yard) for BITUMINOUS COATED AGGREGATE SLOPEWALL, of the thickness specified, which price shall include payment for fine grading of the earth bed, backfilling, disposal of surplus material, and the furnishing and placing of all materials.

### **MEMBRANE WATERPROOFING (SPECIAL)**

A. Description. This work shall consist of furnishing and placing steel bridge deck waterproofing using butyl rubber membrane and protected with 1 inch thick asphalt planks, as shown on the plans and described herein.

B. Materials. The following requirements are quoted from the AREMA Manual for Railway Engineering Chapter 8, Part 29.

1. Butyl Rubber (Butyl-Based IIR)

Membrane shall be minimum 3/32 inch thick.

Membrane shall conform to the following properties:

| Type   | Butyl    |
|--|----------|
| Thickness, minimum inch  | 3/32     |
| Hardness, durometer A  | 60+/- 10 |
| Tensile strength, minimum psi                                    | 1,200    |
| Elongation, ultimate minimum %                                   | 300      |
| Tensile set, maximum %   | 10       |
| Tear resistance, minimum lbf./in.                                | 150      |
| Brittleness temperature, maximum degrees F                       | -49      |
| Heat aging at 240 degrees F:                                     |          |
| Tensile strength, minimum psi                                    | 900      |
| Elongation, ultimate minimum %                                   | 210      |
| Linear dimensional change, maximum %                             | +/- 2    |
| Water absorption maximum, mass %                                 | 2        |
| Factory seam strength, minimum psi                               | 50       |
| Water vapor permeance, maximum perms                             | .0025    |
| Resistance to soil burial (% change, maximum in original value): |          |
| Breaking factory   | 10       |
| Elongation at break  | 10       |
| Puncture resistance lbs.   | 95       |

2. Adhesive

Adhesive for securing membrane and the protective cover shall be in accordance with the recommendations of the membrane manufacturer.

3. Cement

Cement for splicing membrane shall be a self-vulcanizing butyl rubber compound conforming to the following requirements:

Viscosity at 77 degrees F Brookfield Viscometer (#3 Spindle at 10 rpm)  
 1,700-3,400 cps.  
 Applied to both mating surfaces at 2 gallons/150 square foot.

4. Butyl Gum Tape

Butyl gum tape for splicing membrane shall be black, vulcanizable butyl rubber with an 8 mil polyethylene film backing. The tape shall be 30 (+4) mils thick, including the backing.

5. Asphalt Plank for Membrane Protection

Asphalt plank shall meet the requirements of ASTM designation D 517. Asphalt plank used for protection of waterproofing membranes shall be plain and have a minimum total thickness of 1 inch using one or more layers. Edges of asphalt planks to be applied in a single layer shall be supplied with shiplapped joints.

6. Asphalt for Mopping

Asphalt shall meet the requirements of ASTM designation D 449 Type II.

7. Anti-Bonding Paper

Anti-bonding paper shall be a tough paper that shall be impervious to the bituminous material applied to the membrane. It shall have a weight not less than 5 lb per 100 square foot.

C. Inspection and Tests.

1. Materials shall be sampled and tested by the current methods recommended by ASTM.
2. The acceptance of any material by the inspector shall not be a bar to their subsequent rejection if found defective. Rejected material shall be promptly removed from the job and replaced with acceptable material.
3. No material shall be used until it has been accepted by the Engineer.

D. Construction.

1. General

Butyl Rubber Membrane shall not be applied when atmospheric temperature is below 10 degrees F without written permission of the Engineer. Surfaces to be waterproofed shall be clean, smooth, dry, and free of fins, sharp edges, oil, grease and loose or foreign materials. New concrete shall have cured for a minimum of seven (7) days, or for a longer period if recommended by the manufacturer, before applying the waterproofing system. Projections or depression on the surface on which the membrane is to be applied that may cause injury to the membrane shall be removed or filled as directed by the Engineer.

There shall be no depressions or pockets in horizontal surfaces of the finished waterproofing. The membrane shall be carefully turned into drainage fittings. Special care shall be taken to make the waterproofing effective along the sides and ends of girders and at stiffeners, gussets, etc.

2. Butyl Rubber Membrane

For surfaces to be waterproofed with a membrane secured with adhesive, the adhesive shall be applied to ballast retainers and ends of deck in a solid area extending a minimum of 36 inches. At the Engineer's option, adhesive may be applied to the entire surface to be waterproofed. Adhesive should be applied in a thin layer (by using a roller or brush as recommended by the manufacturer) at a minimum rate of 1 gallon per 60 square foot based on both mating surfaces.



Membrane sheets shall first be positioned and drawn tight without stretching. Half of the membrane is then uniformly rolled up in a direction away from the starting edge or subsequent splice. Adhesive is now applied to the exposed area. Allow adhesive to dry so as to not stick to a dry finger touch and all solvent is evaporated. The membrane is now unrolled and pressed firmly and uniformly in place, using care to avoid trapping of air. The same procedure is repeated for the remaining half of the membrane sheets. Wrinkles and buckles shall be avoided. Each succeeding sheet shall be positioned to fit the previously installed sheet and spliced.

Splices shall be of No. 1 tongue-and-groove type or No. 2 butt splice type. Splices shall be made as shown in Figure 8-29-3 of the AREMA Manual for Railway Engineering. All seam, lap and splice areas shall be cleaned with heptane, hexane, toluene, trichloroethylene or white gasoline, using a clean cloth, mop or similar synthetic cleaning device. Cement shall be spread continuously on seam, lap, and splice areas at a uniform rate of not less than 2 gal per 150 square foot based on both mating surfaces. After cement is allowed to dry until it will not stick to a dry finger touch, apply butyl gum tape to cemented area of membrane, pressing firmly into place, obtaining full contact. Bridging and wrinkles shall be avoided. Corner splices shall be reinforced with two continuous layers of rubber membrane over one layer of butyl tape.

All projecting pipe, conduits, sleeves, etc., passing through membrane waterproofing shall be flashed with prefabricated or field-fabricated boots, fitted coverings, etc., as necessary to provide watertight construction. Butyl gum tape shall be used between layers of rubber membrane.

At expansion joints of bridge decks protected with butyl rubber membrane waterproofing, a strip of anti-bonding paper 18 inches wide and a sheet of 22-gage galvanized metal a minimum of 12 inches wide shall be laid and centered on the joint both above and below the membrane before the protective cover is applied.

Any holes in the membrane sheeting shall be patched with a minimum overlap of 4 inches and in accordance with manufacturer's instructions.

During construction, care shall be exercised to prevent damage to the waterproofing membrane by men or equipment.

### 3. Protective Cover

Asphalt plank shall be placed over all waterproofing membranes to eliminate damage from ballast contact as soon as practicable within 24 hours after the membrane has been laid. Dirt and other foreign material shall be removed from the membrane before the protective cover is placed. Protective cover shall be shielded with permanent cover within 48 hours, unless a temporary cover, approved by the Engineer, is placed.

Asphalt planks shall be laid in a coating of bonding adhesive as specified in Article B. 2. The adhesive shall be applied at a rate of not less than 1 gal. per 100 square feet. Voids between joints shall be filled with a compatible material as described in Article B.6.

Within 48 hours of placing membrane protection and prior to placing any wheels from vehicular or equipment traffic on the bridge deck, a minimum 4 inch thick layer of ballast shall be dumped and spread uniformly covering the asphalt planks. Care shall be taken to ensure that the planks are not shifted from their placed position.

Where edges or protrusions of asphalt planks are exposed to prolonged sunlight, coat exposed areas with Fiber Aluminum Roof Coating meeting ASTM Designation D 2824, Type 2 at a rate of 12 square feet per gallon (1/8 inch thickness).

E. Measurement and Payment.

1. Bridge deck waterproofing will be measured by the square yard of horizontal and vertical surface that is waterproofed in accordance with the plans and as directed by the Engineer.
2. Bridge deck waterproofing shall be paid for at the contract unit price per square yard for MEMBRANE WATERPROOFING (SPECIAL) of acceptable waterproofing in place. This price shall include full compensation for furnishing all materials, labor, tools, equipment, supervision and incidentals necessary to complete the work in accordance with the plans as Special Provisions.

**ELASTOMERIC BEARING ASSEMBLY TYPE 1 (SPECIAL)**

This work shall consist of furnishing and installing the elastomeric bearing pads as shown on the plans and described in this Special Provision. Except as noted herein, the work shall be in accordance with the applicable provisions of Sections 503 and 1083 of the Standard Specification.

Materials: The elastomer for the bearing pads shall be Hardness, Type A Durometer  $60 \pm 5$  in accordance with ASTM D 2240.

The gel type epoxy used to glue the bearings to the concrete bearing seats shall be a two component system conforming to the requirements of ASTM Designation: C 881, Type IV, Grade 2, Class B or C. The class supplied shall be governed by the range of temperatures for which the material is to be used.

Installation: The elastomeric bearings shall be installed prior to the application of Bridge Seat Sealer.

The elastomeric bearings shall be installed glued to the concrete bearing seats. Bearing areas which are to receive epoxy materials shall be abrasive blast cleaned to remove all form oil and curing agents and shall be in a dust free condition.

Clean bottom surfaces of bearing pads with methyl ethyl ketone to remove all traces of mold release agent. When mating surfaces are clean and dry, gel type epoxy as specified, above, shall be applied to a 5 mil thickness on the areas of the bearing seats where the elastomeric bearing pads are to be placed, and on the bottom side of the elastomeric pads and then the pads shall be set and held in the proper location on the bearing seat until the epoxy takes its initial set. Pads must be held down with sufficient weight to insure total pad contact on the bearing seat.

## **BALLAST DRAINS**

This work shall consist of furnishing and installing the perforated, galvanized metal ballast drains and downspouts as shown on the plans and described in this Special Provision. Pipe metals shall conform to Article 1006.01 (a) of the Standard Specification.

Cut edges and welded connections shall be coated with a zinc metallizing process, aluminum asphalt paint or other methods approved by the Engineer.

The ballast drains and downspouts shall be measured in feet. The length paid for will be the overall length along the pipe outer surface through all fittings. The fittings to fasten the downspouts to the structure shall not be measured for payment but shall be included in the work.

The work will be paid for at the contract unit price per foot for BALLAST DRAINS, which price shall include all materials, fabrication, transportation and erection.

## **SURVEY TIES**

Survey ties for section corners shall 'cast-in-place' constructed as show in the plan details.

## **STEEL PIPE CULVERT, SPECIAL (JACKED) 24 INCHES**

This work shall consist of jacking a steel pipe under the railroad embankment in accordance with Section 552 of the Standard Specifications and this special provision.

The steel pipe shall have a minimum yield strength of 35,000 lb/sq in for E-80 loading and have a minimum wall thickness of .188 inches.

All joints shall be field welded as approved by the Engineer. Any voids between the pipe and the embankment shall be filled with grout to the satisfaction of the Engineer. The steel pipe culvert shall be installed in accordance with the latest edition of the A.R.E.A. manual, and BNSF policy.

A jacking plan shall be provided to the Engineer and Railroad Company for approval.

Method of Measurement. Steel Pipe Culvert, Special jacked in place of the different diameters will be measured for payment in feet in place.

Excavation in rock will be measured for payment as specified in Article 502.14.

Basis of Payment. This work will be paid for at the contract unit price per meter (foot) for Steel Pipe Culvert, Special (Jacked) of the diameter specified, which price shall include the steel pipe culvert, including backfilling all voids and all other materials and equipment necessary to install the steel pipe culvert and all excavation except excavation in rock.

Excavation in rock will be paid for as specified in Article 502.15 for Rock Excavation for Structures.

### **REMOVE SHOOFLY TRACK**

This work consists of the complete removal and proper disposal of all materials associated with the shoofly not paid for separately in the plans. Includes, but not limited to: track, ties, ballast, sub-ballast, and work listed below.

The 24" steel pipe culvert under the shoofly is to be removed.

The temporary easement for the shoofly is to be restored to its original condition, all ruts and swales shall be eliminated. Top soil removed and stockpiled shall be returned to the temporary easement. All disturbed ground within the temporary easement shall thoroughly disked to the satisfaction of the Engineer.

Salvage value of the rail material should be considered in the bid price.

Earth embankment to be removed will be paid for as Earth Excavation.

This work shall be measured for payment in lineal feet as measured along the center line of the shoo-fly track.

This work will be paid for at the contract unit price per foot for REMOVE SHOOFLY TRACK.

### **CONCRETE GUTTER (SPECIAL)**

This work consists of all labor, equipment, and materials required to construct the concrete gutter special at the locations shown in the plans. This work shall be in compliance with Section 606 of the Standard Specifications and the plan details.

This work will be measured and paid for at the contract unit price per foot measured along the flow line of the gutter including Inlets and outlets.

**SUBBASE GRANULAR MATERIAL**

Effective: November 5, 2004

This work shall be in accordance with Section 311 of the Standard Specifications and as specified herein.

All Sub-base Granular Material shall have a minimum IBR of 40.

**BITUMINOUS BASE COURSE 3.25" AND 8"**

Effective: April 1, 1996      Revised: April 23, 2004

The bituminous mixtures used in these items shall be in accordance with the mixture design requirements as set forth in the contract. The mixtures shall be proportioned and tested in accordance with the appropriate sections of the Recurring Special Provision, "Quality Control/Quality Assurance for Bituminous Concrete Mixtures" as determined by the Engineer.

**PLACEMENT OF BITUMINOUS SURFACE COURSES**

Effective: March 22, 2001      Revised: April 29, 2005

Placement of bituminous concrete surface courses shall not be allowed after October 15<sup>th</sup> of any calendar year. The contractor is responsible for scheduling construction activities to complete placement of surface courses prior to October 15<sup>th</sup>. If surface courses are not in place by October 15<sup>th</sup>, the contractor is responsible for implementing any measures needed to make the roadway suitable for winter traffic and snow plowing activities. Any additional costs associated with this provision shall be considered included in the cost of the unit prices bid for bituminous surface course items.

**BITUMINOUS SURFACE COURSE SURFACE TESTS**

Effective: November 1, 2003

The Contractor shall provide a person to operate the straight edge in accordance with Article 406.21 of the Standard Specifications and communicate with IDOT personnel to minimize the surface course bumps. If surface course bumps cannot be removed at this time, IDOT personnel will record the locations and provide deductions as stated in Article 406.21.

**SEEPAGE COLLAR**

Effective December 1, 1996

This work shall be done in accordance with Section 542 of the Standard Specifications and details shown in the plans.

Basis of Payment. This work will be paid for at the contract unit price per each for SEEPAGE COLLAR.

**PIPE CULVERTS (TEMPORARY)**

Effective July 1, 1990

Revised July 1, 1994

This work shall be done in accordance with Section 542 of the Standard Specifications at the locations shown on the plans. After the proposed detour road is abandoned, the pipe shall be removed and shall become the property of the Contractor. The Contractor shall consider the salvage value of the pipe when preparing his unit bid price.

This work will be paid for at the contract unit price per meter (foot) for PIPE CULVERTS (TEMPORARY) of the types and diameters specified.

**PIPE CULVERTS**

Effective July 1, 1990

Revised July 1, 1994

Add the following sentence to the fourth paragraph of Article 542.04(d): "All connecting bands shall be a minimum of 600 mm (24") wide".

**BACKFILL - PIPE CULVERTS**

Effective October 15, 1995

Revised April 23, 2004

When trenches or excavation are made across existing pavement to remain in place, revise Article 542.04(e) 4th and 5th paragraphs as follows:

"The remainder of the trench and excavation shall be backfilled with trench backfill. All backfill material shall be deposited in the trench or excavation in such a manner as not to damage the culvert. Trench backfill above the center of the pipe shall be compacted by either Method 2 or Method 3 specified in Article 550.07, or in accordance with Method 1 specified in Article 550.07, except that the compacted lifts shall not exceed 200 mm (8 inches) in thickness.

When the trench has been widened for the removal and replacement of unstable or unsuitable material, the backfilling with trench backfill and impervious material will be required for the entire width of the trench or excavation. Each 200 mm (8 inch) layer for the entire trench width shall be completed before beginning the placement of the next layer."

Basis of Payment: This work will not be paid for separately but shall be included in the contract unit price per meter (foot) for PIPE CULVERTS, of the type and diameter specified. Trench backfill will be paid for as specified in Article 208.04.

**STORM SEWER (SPECIAL)**

Effective July 1, 1990

Revised January 3, 2000

This work shall consist of constructing sewers designated as Storm Sewer (Special) to replace existing Farm Underdrains at locations not shown on the plans but determined in the field by means of exploration trench. This work shall be done in accordance with Section 550 of the Standard Specifications and the following provisions:

1. All Farm Underdrains 200 mm (8 inches) in diameter and smaller shall be replaced with Storm Sewer (Special) 200 mm (8 inches), and Farm Underdrains 250 mm (10 inches), 300 mm (12 inches), and 375 mm (15 inches) shall be replaced with Storm Sewer (Special) 250 mm (10 inches), 300 mm (12 inches), and 375 mm (15 inches) respectively.
2. The Engineer shall determine the limits of replacement of the existing Farm Underdrains.
3. Any material listed in Article 550.03 of the Standard Specifications for Storm Sewers, Type 1-7 inclusive will be permitted subject to the limitations specified in the table of this Article.
4. Revise the first paragraph of Article 550.09 to read: "This work will be paid for in accordance with Article 109.04".
5. Add the following paragraph to Article 550.09: "Exploration Trench 1.3 m (52 inch) depth shall be measured and paid for separately as provided in Section 213 of the Standard Specifications.

#### **BACKFILL, BUILDING REMOVAL**

Effective August 20, 1991

Revised September 23, 1996

All material furnished for backfilling holes and basements for building removal shall satisfy Article 1003.04 or 1004.06 of the Standard Specifications.

The cavities under the proposed roadway shall be backfilled as outlined under Article 550.07 Method 1, 2, or 3 of the Standard Specifications.

Aggregate used shall contain no frozen matter nor shall the aggregate be placed on snow or ice. Jetting or inundating shall not be done during freezing weather.

After the filling of the void, the site shall be graded and cleaned-up to the satisfaction of the Engineer.

If there is a possibility of trapping of sub-surface drainage, basement floors shall be broken to comply with local building codes to prevent entrapment of water.

A suitable earth cap, minimum 300 mm (12 inches) thick, shall be placed as the final backfill lift on all cavity areas outside the proposed embankment or pavement structure.

This work will not be paid for separately, but shall be included in the cost of the building removal pay items included in the contract.

#### **EROSION CONTROL CURB**

Effective April 1, 1991

Revised July 1, 1994

This work shall include all labor, material, and equipment to construct an erosion control curb in accordance with the details in the plans and at the locations shown on the plans.

The erosion control curb will be measured in meters (feet) along the front face of the board mounted to the guardrail.

This work will be paid for at the contract unit price per meter (foot) of EROSION CONTROL CURB.

### **GUARDRAIL AGGREGATE EROSION CONTROL**

Effective February 1, 1993                      Revised May 1, 1995

This work shall consist of furnishing, placing, and shaping crushed aggregate placed around and behind guardrail posts in accordance with plan details.

Method of Measurement: The aggregate for constructing the Guardrail Aggregate Erosion Control will be measured in metric tons (tons).

The Geotextile Fabric will not be measured for payment.

Basis of Payment: Guardrail Aggregate Erosion Control will be paid for at the contract unit price per metric ton (ton) for GUARDRAIL AGGREGATE EROSION CONTROL measured as specified herein. The Geotextile Fabric will not be measured for payment, but shall be included in the cost per metric ton (ton) for GUARDRAIL AGGREGATE EROSION CONTROL.

### **PERMANENT SURVEY MARKER, TYPE 1, BRIDGE PLACEMENT**

Effective July 1, 1990                      Revised September 1, 1997

This work shall consist of furnishing and installing a Permanent Survey Marker as shown on the plans and as specified herein. The survey marker shall be placed in either the abutment seat or in the top of the wingwall. The survey marker shall be located in the same corner as the Bridge Name Plate as shown on the current Standard for Name Plate for Bridges. If the survey marker is to be located on the abutment seat of the structure, it shall be placed in a location with at least 2.4 m (8'-0") vertical clearance directly above the survey marker, if possible.

After installation, the Contractor shall stamp the elevation provided by the Engineer in the face of the survey marker. The Engineer shall provide the District Chief of Surveys with the elevation and location of the marker.

This work will be paid for at the contract unit price each for PERMANENT SURVEY MARKER, TYPE I.

### **PERMANENT SURVEY TIES**

Effective April 1, 1991                      Revised July 1, 1994

This work shall consist of furnishing and installing a permanent survey tie at the locations shown in the plans and in accordance with the Detail for Permanent Survey Ties included in the plans.



The Class SI concrete used in the permanent survey ties shall be in accordance with Section 503 of the Standard Specifications. The reinforcement bars used shall be in accordance with Section 508 of the Standard Specifications.

### **EQUIPMENT VAULT FOR NUCLEAR TESTING EQUIPMENT**

Effective June 24, 1993

Revised July 1, 1994

Add the following to the list of equipment and furniture to be furnished under Article 670.05 Engineer's Field Laboratory.

A cabinet or vault shall be provided for the nuclear density equipment which shall have a suitable barrier system of concrete, steel, lead, or other radiation barrier material and shall remain at the job site. It shall have a dimension capable of holding the number of units being stored at the site and shall have a lock for security to prevent intruders from gaining access to this equipment. All walls and doors of the unit shall be sufficient thickness to prevent any radiation leakage from the equipment should a malfunction result which would allow this leakage.

The cost of furnishing the equipment vault will not be paid for separately but shall be considered as included in the unit cost for ENGINEER'S FIELD LABORATORY.

### **RAILROAD TIES REMOVAL AND DISPOSAL**

The following situations explain how (weathered) treated wood, when sent for disposal or reuse, are covered by I.E.P.A. regulations.

The waste classification of the railroad ties is dependent upon the physical appearance of the tie. Railroad ties are commonly preserved with Cresol, Pentachlorophenol, or CCA (Copper, Chromium, and Arsenic). These compounds could exhibit the characteristics of a Resource Conservation and Recovery Act (RCRA) hazardous waste.

Each railroad tie that is completely dry and shows no visible wood treatment (Cresol or Pentachlorophenol) residue is considered a solid waste and can be disposed of as demolition debris. Any railroad tie that contains visible wood treatment residue should be sampled and analyzed to determine the toxicity characteristics using the toxicity characteristics leaching procedure (TCLP) test method. The railroad tie is considered an RCRA hazardous waste if the toxicity characteristics exceed 200 milligrams per liter (mg/l) for either o-Cresol, m-Cresol, p-Cresol, or total Cresol; 200 mg/l for Chromium; and 5.0 mg/l for Arsenic (35 Illinois Administration Case 721.124). The Contractor shall be responsible for the proper disposal of RCCA hazardous waste.

This work shall be done in accordance with the applicable portions of Section 202 of the Standard Specifications and as directed by the Engineer.

This work will not be paid for separately, but shall be included in the unit cost of REMOVE SHOOFLY TRACK.

## **TRAFFIC CONTROL PLAN**

Effective: March 27, 2006

Traffic control shall be in accordance with the applicable sections of the "Standard Specifications for Road and Bridge Construction," the applicable guidelines contained in the "Illinois Manual on Uniform Traffic Control Devices for Streets and Highways," these Special Provisions, and any special details and Highway Standards contained herein and in the plans.

Special attention is called to Section 701 and Articles 107.09 and 107.14 of the "Standard Specifications for Road and Bridge Construction" and the following Highway Standards relating to traffic control:

|        |        |        |        |        |        |
|--------|--------|--------|--------|--------|--------|
| 701006 | 701101 | 701201 | 701306 | 701331 | 701326 |
| 701406 | 702001 | BLR 17 | BLR 18 | BLR 21 | BLR 22 |

Local Road Closure Restrictions: Temporary local road closures shall not be implemented until work in that area is ready to commence. All temporary closures of local roads shall be of the shortest duration feasible; work during road closures shall be continuous.

### Stage 1:

TR 350E may be closed for paving and earthwork at the intersection with IL 336 and the Service Drive. Reopen TR 350E to traffic using the 9" bituminous binder course of IL 336 and Temporary Ramp as required. The Contractor shall schedule his work to have TR 350E reopened within 4 weeks of closure.

Service Drive; Coordinate pavement, culvert, and bridge construction to provide continuous access to the residence on the service drive from either US 136 or TR 350E as construction staging permits.

TR 102 (E 400) is to remain open in Stage 1 while TR 350E is closed. TR 102 (E 400) permanent closure after TR 350E is re-opened.

TR 118 (E 450) is to remain open at all times using a run-around detour.

TR 154 (E 550) is to remain open in Stage 1 while TR 150 (E 600) is closed. TR 154 (E 550) permanent closure after TR 150 (E 600) is re-opened.

TR 150 (E 600) may be closed for paving, earthwork and the 9" binder course at the IL 336 intersection. The Contractor shall schedule his work to have TR 150 (E 600) reopened within 4 weeks of closure.

Reopen TR 150 (E 600) to traffic using the 9" bituminous binder course of IL 336 and Temporary Ramp as required. Provide the signed detour as shown in plan details.

CH 8 (west) is to remain open to traffic at all times, provide 2 lane 2 way traffic when workers are not present. Work at the intersection of CH 8 (west) and TR 900N to be completed under traffic using appropriate traffic control and flagmen as required.

CH 8 (east) is to remain open at all times in Stage 1, drainage work to be completed under traffic. Earthwork and paving at this intersection to be delayed until Stage 2.

TR194 (E 700) is a dead end, low volume road it is to remain open at all times. Maintain temporary access to TR 900N.

TR 900N & TR 200 (E 750) will be closed to construct the relocations and the intersection with IL 336. Provide signed detours as shown in plan details. The Contractor shall schedule his work to have TR 900N and TR 200 (E 750) reopened within 6 weeks of closure.

Open relocated TR 900N and TR 200 (E 750) using the 9" bituminous binder course and Temporary Ramps to cross IL 336 at the township roads. CH 8 east and west intersections must be open to traffic when TR 200 (E 750) or TR 900N are closed.

TR 226 (E 850) may be closed after TR 900N and TR 200 (E 750) relocations are completed. TR 226 (E 850) north to remain closed until IL 336 is open to traffic.

#### Winter Shut Down

All Township and County Highways, except those which are permanently closed, shall be open with full lane width. Paint pavement marking shall be in place for the local roads currently having centerline markings. Type III barricades shall be in place on IL 336 at all junctions with local roads as shown in the plans.

Detour signing should be removed or covered.

#### Stage 2:

TR 350E, a short-term closure of 7 calendar days will be allowed for IL 336 paving work through the intersection.

TR 118 (E 450) intersection paving shall be completed, including the surface course, before removing the detour run-around.

TR 150 (E 600), a short-term closure of 7 calendar days will be allowed for paving work at the IL336 intersection. Detour traffic to CH 8 (east) as shown in the plan details.

CH8 (east) to be closed for earthwork and paving in the intersection area gapped by stage 1 construction. Traffic is to be detoured to TR 150 (E 600) as shown in the plan details. Bituminous surface paving at the intersection of TR 150 (E600), CH 8 (west) relocation and IL336 shall be completed before closing CH 8 (east).

CH 8 is to be reopened using the temporary connector to TR 900N once all paving operations are completed in the intersection area. Work is to be continuous to reopen Ch 8 as soon as feasible. The temporary connector to TR 900N is to be removed when IL 336 is opened to traffic.

TR 194 (E 700) is to remain open during paving operations. The temporary connector to TR 900N to remain open until IL 336 is opened to traffic.

TR 200 (E 750) may be closed for seven (7) calendar days for bituminous surface paving operations provided the signed detour is in place.

### Contractor Access

At road closure locations where Type III barricades are installed in a manner that will not allow Contractor access to the project without relocation of one or more of the barricades, the arrangement of the barricades at the beginning of each work day may be relocated, when approved by the Engineer, in the manner shown on Highway Standard 702001 for Road Closed to Through Traffic. "Road Closed" signs (R11-2), supplemented by "Except Authorized Vehicles" signs (R3-I101), shall be mounted on both the near-right and far-left barricade(s). At the end of each work day the barricades shall be returned to their in-line positions. This work will be considered incidental to the contract, and no extra compensation will be allowed.

Traffic Control Surveillance is required on this project.

Temporary signs, additional signs, and barricades shown in the M.O.T. sheets will not be paid for separately, but shall be included in the cost of traffic control pay items.

### **TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR**

Effective October 5, 2004

This work consists of furnishing, installation, maintenance, relocation and removal of the detour signing and barricades at locations shown in the plans. This work shall comply with applicable portions of Article 701 of the Standard Specifications and plan details.

Basis of Payment: This work shall be paid for at the contract price per lump sum for TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR, which price shall include all labor, materials and equipment necessary to install, maintain, remove and relocate the temporary traffic control at the various locations.

### **SHAPING AND GRADING ROADWAY**

This work shall consist of clearing, grading and preparing the sub-grade for a temporary access road. Clearing shall be as described in Section 200 of the Standard Specifications.

After the clearing operation is completed, the temporary roadway shall be shaped and graded to provide a smooth working base to place the aggregate surface. V-ditches shall be provided to ensure adequate drainage. Any abrupt changes in elevation shall be graded to provide for a smooth transition. All holes, ruts or other defects shall be corrected. The sub-grade shall be shaped and compacted to the satisfaction of the Engineer.

Method of Measurement and Payment: Method of measurement and payment shall be as described in Article 301.10(b) and Article 301.11 of the Standard Specifications.

### **CLAY SEAL**

Effective: February 18, 2004

This work consists of constructing a 3.5-foot layer of embankment at the locations shown in the plans; to protect the erodible soils encountered in cut sections. The erodible soil shall be removed and replaced with a non-restricted soil as defined in the special provision, "Borrow and Furnished Excavation" with a minimum clay content of three percent (23%).

This work shall not be paid for separately, but shall be considered as included in the unit bid price for the various earthwork pay items.

### **SETTLEMENT PLATFORMS**

This work shall consist of furnishing and placing Settlement Platforms meeting the requirements of Article 204.03 and Article 204.06 of the Standard Specifications and the plan details.

Minimum schedule of Measurements:

- a) Once per week or once per 10.0 feet of fill placed.
- b) Once per week for two (2) months after completion of fill placement or until the settlement pattern in Settlement Analysis is confirmed.
- c) Once every two (2) weeks for two (2) months and once per month as needed to establish a comparative settlement analysis and confirm embankment performance.

Estimated Rate of Settlement: t95 with wick drains, without surcharge load, with and without topsoil equals 180 days.

Basis of Payment: This work shall be measured and paid for at the contract unit price each for SETTLEMENT PLATFORMS complete and in place.

### **VERTICAL PLASTIC DRAINAGE WICKS**

This work shall consist of place vertical plastic wicks in accordance with the details and at locations show in the plans. Placement shall be in a grid pattern as shown in the plan detail. The lengths will vary according to the location, as shown in the plan schedule.

The existing ground surface shall be stripped to a minimum depth of 4" inches as required to remove all vegetation and rubbish. Stripping of the ground surface shall be considered as clearing in accordance with Section 201 of the Standard Specifications and will not be measured for payment.

The material for the wick drains shall be Amerdrain 407 or equal, as approved by the Engineer.

Method of Measurement: Vertical Plastic Drainage Wicks will be measured for payment in place in feet.

Basis of Payment: This work will be paid for at the contract unit price per foot for VERTICAL PLASTIC DRAINAGE WICKS, which price shall include all labor, equipment and material to complete the work.

### **OPEN-GRADED DRAINAGE BLANKET**

This work shall consist of placing a layer of fine aggregate and riprap end cap, as shown in the plans, immediately above the Vertical Drainage Wicks to provide drainage for water migrating out of the existing ground due to settlement.

The fine aggregate shall be FA-1 Class A quality, in accordance with applicable portions of Article 1003 of the Standard Specifications. Construction requirements shall be in accordance with Section 282 of the Standard Specifications.

The riprap cap shall consist of a layer of Stone Dumped RipRap Class B3, a layer of coarse aggregate, CA-16 crushed stone or crushed gravel, and filter fabric. The coarse aggregate shall be in accordance with applicable portions of Section 1004 of the Standard Specifications, the filter fabric shall meet the requirements of Section 282 of the Standard Specifications.

Method of Measurement: Open-graded drainage blanket will be measured for payment in cubic yards compacted in place and the volume computed by average end area method.

Basis of Payment: This work will be paid for at the contract unit price per cubic yard for OPEN-GRADED DRAINAGE BLANKET, which price shall include all labor, equipment and material to complete the work as described herein and as shown in the plans. The riprap, coarse aggregate CA-16 and filter fabric will not be paid for separately, but shall be included in the contract unit price for OPEN-GRADED DRAINAGE BLANKET.

### **PAVEMENT MARKING REMOVAL/WORK ZONE PAVEMENT MARKING REMOVAL**

Effective: April 29, 2005

Description: This work shall consist of removing all permanent or work zone pavement marking, painted pavement markings, epoxy paint pavement markings, thermoplastic pavement marking, or pavement marking tape type III by hydro-blasting in accordance with the applicable portions of Section 783 and 703 of the Standard Specifications and described herein. Pavement marking tape type III may be peeled or burned off. However, all remnants or burn marks shall be hydro-blasted.

Equipment Requirements: All equipment shall be of sufficient capacity to efficiently and economically clean the roadway surface to the specified cleanliness. Equipment shall be power driven and in good operating condition. Equipment shall utilize moisture and oil traps, in working order, of sufficient capacity to remove contaminants from the water and prevent deposition of oil and other contaminants on the roadway surface.

Removal Requirements: Removal requirements shall be as follows:

- a) The existing paint pavement markings or epoxy paint pavement markings shall be removed without pavement surface damage to the satisfaction of the Engineer.
- b) A high pressure water spray or "hydro-blast" shall be used during the removal, the pressure at the nozzle shall be approximately 172,000 kPa (25,000 psi) with maximum flow rate of 56 L/min (15 gal/min). The nozzle shall be in close proximity to the pavement surface.
- c) Over cleaning to the extent of possible damage to the roadway surface shall be held to a minimum. Very small particles of tightly adhering existing markings may remain in place, if in the opinion of the Engineer, complete removal of the small particles will result in pavement surface damage.

Method of Measurement: The removal of permanent or work zone pavement marking, painted pavement markings, epoxy paint pavement markings, thermoplastic pavement marking, or pavement marking tape type III will be measured in square feet (square meter).

Basis of Payment: This work will be paid for at the contract unit price per square foot (square meter) for PAVEMENT MARKING REMOVAL or WORK ZONE PAVEMENT MARKING REMOVAL.

## **TEMPORARY CONCRETE BARRIER REFLECTORS**

Effective: January 21, 2005

Installation of reflectors shall be in accordance with the Traffic Control Standards, plan details, and specifications.

Reflectors mounted on temporary concrete barrier will not be measured for payment and shall be included in the cost of pay items associated with temporary concrete barrier.

**TEMPORARY CONCRETE BARRIER, STATE OWNED AND TEMPORARY CONCRETE BARRIER TERMINAL SECTIONS, STATE OWNED**

Effective May 1, 1991

Revised October 23, 1996

The temporary concrete barrier and terminal sections shall be obtained by the Contractor from the Macomb Maintenance Storage Yard. This work shall consist of picking up and delivering to the worksite, placing, removing and returning the aforementioned barrier, terminal sections, and connecting pins to the Macomb Maintenance Storage Yard.

Temporary Concrete Barrier shall be installed according to Standard 704001 and applicable portions of the Standard Specifications. The Contractor shall supply the styrofoam pads required in the above standard. The placement and location of the barrier shall be as shown on the plans and as directed by the Engineer.

This work will be paid for at the contract unit price per meter (foot) for TEMPORARY CONCRETE BARRIER, STATE OWNED and each for TEMPORARY CONCRETE BARRIER, TERMINAL SECTION, STATE OWNED.

**COARSE AGGREGATE FOR BITUMINOUS COURSES, CLASS A**

Effective June 29, 1993

Revised August 1, 2003

The aggregate shall conform to Article 1004.03 of the Standard Specifications for Road and Bridge Construction, adopted by the Department of Transportation, except that one, but not both, of the following revisions to Article 1004.03(b) will apply:

1. Revise the maximum allowable percentage of weighted average loss when the material is subjected to 5 cycles of the sodium sulfate soundness test from 20% as shown under Class C of the quality chart in Article 1004.01(b) of the Standard Specifications to 30%.
2. Revise the maximum allowable percentage of wear as determined by the Los Angeles Abrasion Method from 40%, as shown under Class C of the quality chart in Article 1004.01(b) of the Standard Specifications to 60%.

**AGGREGATE QUALITY**

Effective July 1, 1990

Revised September 23, 1996

Coarse aggregate for Granular Embankment Special, Sub-base Granular Material, Aggregate Shoulders, Aggregate Surface and Base Courses, and Erosion Control Aggregate shall conform to Article 1004.04 of the Standard Specifications for Road and Bridge Construction except that all of the following revisions to Article 1004.04(b) shall apply:

1. Revise the maximum allowable percentage of weighted average loss when the material is subjected to 5 cycles of sodium sulfate soundness test from 25%, as shown under the Class D of the Quality Chart in Article 1004.01(b) of the Standard Specifications, to 40%; and



2. Revise the maximum allowable percentage of wear as determined by the Los Angeles Abrasion Method from 45%, as shown under Class D of the Quality Chart in Article 1004.01(b) of the Standard Specifications, to 65%; and
3. The sum of the percentages of weighted average loss when the material is subjected to 5 cycles of the sodium sulfate soundness test and the percentage of wear as determined by the Los Angeles Abrasion Method shall not exceed 95%.

### **GRANULAR AGGREGATE COURSES**

Effective February 19, 1992

Revised October 1, 1999

Revise the first sentence in the fifth paragraph of Article 1004.04(c) to read: "For granular aggregate courses--base, subbase, and shoulder except subbase Types B and C--gradation CA 6 or CA 10 may be used."

### **RAP MATERIALS - CRUSHED STEEL SLAG**

Effective April 1, 1997

Add the following to Article 1004.07 of the Standard Specifications: RAP containing crushed steel slag will be permitted in Bituminous Mixtures C and D as final top lift only.

### **FURNISHING AND MAINTAINING AUTOMOTIVE VEHICLE**

Description. This item shall consist of furnishing, servicing and maintaining in good repair one (1) unmarked ½ ton pickup truck with four-wheel drive as approved by IDOT. These vehicles are for use by IDOT personnel in conformance with Illinois Departmental Order 11-2, Vehicle Operator's Manual concerning the use and operation of vehicles.

General Requirements. The vehicles shall be equipped with air conditioning, power steering and brakes, automatic transmission, strobe light bar, AM/FM radio, cruise control, seat belts and equipment boxes on the sides and front of the pickup truck bed. Agency provided two-way radios shall be installed in the supplied vehicles. The vehicles will be used for the duration of the project. The vehicles shall be late model, low mileage or new and shall have a valid certificate of safety affixed to the windshield if required by the Illinois Vehicle Code.

Additional items associated with the vehicles and/or maintenance of the vehicles such as gas, oil, filters and lubrication shall be the responsibility of the contractor.

Insurance shall be provided by the contractor meeting the requirements of Article 107.27 of the Standard Specifications for Road and Bridge Construction. IDOT shall be named as an additional insured on the policy. A copy of the required vehicle insurance shall be submitted to IDOT prior to the performance of any work.

If the vehicle is withdrawn from service for more than one working day for mechanical repairs or body damage, the contractor shall provide a substitute vehicle of similar quality.

Basis of Payment. This work will be paid for at the contract unit price per calendar month or portion thereof for FURNISHING AND MAINTAINING AUTOMOTIVE VEHICLE, of the number specified.

### **BRIDGE FLOOR FINISHING MACHINE**

Effective May 1, 1995

Revised January 3, 2000

Delete Article 503.17(c)(2), "Floors under 30 m (100 ft.) in length," from the Standard Specification for Concrete Structures. The bridge floor shall be finished with a finishing machine and surface tested in accordance with Article 503.17(c)(1) of the Standard Specifications.

### **BITUMINOUS SHOULDER RESURFACING CONSTRUCTED SIMULTANEOUSLY WITH MAINLINE PAVING**

Effective January 22, 2001

Revised April 29, 2005

If the Department allows resurfacing bituminous shoulders simultaneously with the mainline pavement resurfacing, a roller meeting the requirements of Article 482.06 shall be required. This roller will be in addition to any rollers required for compaction of the mainline roadway resurfacing. This additional roller will not be paid for separately, but shall be included in the contract unit price bid for the mainline bituminous material being placed.

### **TREE REPLACEMENT**

Effective May 5, 2000

This work shall consist of planting replacement trees at the locations specified in the plans and in accordance with Article 253 of the Standard Specifications. All trees shall be balled and burlapped as per Article 1081.01(b)(3) with a minimum trunk diameter of 1 3/4 to 2 inches (45-50 mm). This work will be paid for at the contract unit price each for the tree species specified in the plans.

### **SUPERPAVE END RESULT SPECIFICATION FULL DEPTH (ERS) (BMFR)**

Effective: October 15, 2003

Description. This Special Provision establishes and describes the responsibilities of the Contractor using Quality Level Analysis on Superpave bituminous concrete mixtures. The Contractor shall test both payment and non-payment parameters as specified herein. Pay factor parameters shall apply to asphalt content, voids, and in-place density. Non-pay factor parameters shall apply to aggregate gradation, Gmm, and Gmb. This work shall be according to the requirements of Section 406 of the *Standard Specifications for Road and Bridge Construction* and the Special Provisions, "Quality Control/Quality Assurance of Bituminous

Concrete Mixtures”, Class I, and “Superpave Bituminous Concrete Mixtures”, except as follows. ERS testing and pay factors shall apply to Superpave surface and binder mixtures used on mainline with a minimum mixture quantity of 8000 tons (7,260 metric tons) . Binder lifts without density requirements shall not be used for ERS.

The following documents have been added or modified for ERS purposes to be used in place of the equivalent documents in the current *Manual of Test Procedures for Materials*.

- (a) ERS Bituminous Concrete QC/QA Initial Daily Plant and Random Samples
- (b) ERS Determination of Random Density Test Site Locations
- (c) ERS Quality Level Analysis (Full Depth Revised)

Definitions.

- (a) Lot: A lot for void and asphalt content is the project tonnage of the given mixture. A lot for in-place density is the total paving length of the project for a given mixture. The mixture placed during the test strip(s) shall not be included in the lot. If the test strip is waived, a lot shall begin with the start of production.
- (b) Sublot: A standard subplot for void and asphalt content is between 800 tons (725 metric tons) and 1500 tons depending on the average plant production as determined by the Engineer and the project size. A standard subplot for in-place density is 1 mile (1.6 km).
- (c) Pay factor: An adjustment factor applied to the bid price to determine final payment.
- (d) Quality Level Analysis (QLA): QLA is a statistical procedure for estimating the total percent of a lot that is within specification limits. It is affected by shifts in the arithmetic mean ( $\bar{x}$ ), and by the sample standard deviation, ( $s$ ).
- (e) Percent Within Limits (PWL): The total percent of a lot that is within specification limits.
- (f) Acceptable Quality Level (AQL): AQL is the Percent Within Limits at which a lot will receive 100 percent pay.
- (g) Rejectable Quality Level (RQL): RQL is the Percent Within Limits at which the Department has determined that the material may be rejected.
- (h) Density Test Locations: The station location used for density testing.
- (i) Density Test Site: Individual test site where a single density value is determined. Five (5) test sites are located at each test location.

(j)

Quality Control (QC) by the Contractor. QC shall be according to the Special Provisions, "Quality Control/Quality Assurance of Bituminous Concrete Mixtures", Class I, and "Superpave Bituminous Concrete Mixtures", except the following:

If the Contractor receives approval to use a Superpave mixture when not required by the contract, either Quality Control program may be used at the Contractor's option without pay factor consideration.

If a mixture start-up is not required, an acceptable rolling pattern shall be developed during the first 200 tons (180 metric tons) of each mixture produced.

Required Plant Tests:

- The plant test frequency shall be the lessor of the total project mixture tonnage divided by 10 or the tonnage frequency determined as follows.

The tonnage frequency shall be determined by dividing the average daily production, as approved by the Engineer, by two. The determined tonnage shall be rounded to the nearest 100 tons (90 metric tons). If the determined tonnage is between 800 (725 metric tons) and 1500 tons (1360 metric tons) the tonnage frequency shall be 1 per the determined tonnage. If the determined tonnage is less than 800 tons (725 metric tons), then the tonnage frequency shall be 1 per 800 tons (725 metric tons). If the determined tonnage is greater than 1500 tons (1360 metric tons), then the tonnage frequency shall be 1 per 1500 tons (1360 metric tons).

- The small tonnage option for less than 250 tons (225 metric tons) per mix in a day's production shall not apply.

Required Field Tests:

- Cores shall be used for acceptance testing.
- The three-core layout across the test site shall not apply.
- The District may require that a State gauge(s) be correlated for the mixture.
- Patching shall not apply.

Corrective action for required plant and field tests shall apply only to non-pay factor parameters. However, if the Contractor is not controlling the pay factor parameters and is making no effort to take corrective action, the operation, as directed by the Engineer, shall stop.

All materials are subject to inspection, sampling, and testing at any time before acceptance of the work.

The Engineer shall randomly select the locations within each subplot for both plant and field testing. The plant testing random tonnages shall be determined as per the "ERS Bituminous Concrete QC/QA Initial Daily Plant and Random Samples" document and given to the

Contractor prior to paving. The field density testing random locations shall be determined as per the "ERS Determination of Random Density Test Site Location" document. The density locations shall be disclosed and marked after all compaction efforts have been completed. Locations shall be laid out using a tape measure or an approved measuring wheel.

The Department will use the Contractor's test results for payment when verified by the Engineer. Materials for plant testing shall be sampled by the Contractor at the direction of the Engineer. Three-way split samples of plant mix shall be obtained for pay factor parameters from every subplot for Contractor, Department, and further investigation testing. Two-way split samples shall be obtained for non-pay factor parameters for Contractor and Department testing. These split samples shall be retained by the Contractor until otherwise directed by the Engineer.

Cores shall be used for determination of the in-place density obtained in the compacted mixtures. Each test location within the 1-mile (1.6-km) interval shall consist of five density test sites which will produce ten cores (two per location) as per the "ERS Determination of Random Density Test Site Location" document. The Contractor is responsible for obtaining the cores.

The cores shall be taken in the presence of the Engineer with a device that shall produce a uniform 4-inch (100-mm) diameter pavement sample. Additional cores shall be taken to replace any damaged cores. Subsequent core locations shall be determined by subtracting 1 foot (0.3 m) from the random location using the same transverse offset. Unless otherwise approved by the Engineer, cores shall be taken and filled within 24 hours after placement. All core holes shall be filled with either a rapid set mortar or concrete.

Rapid set materials shall be obtained from the Department's approved list of Packaged, Dry, Rapid Hardening Cementitious Materials For Concrete Repair. Mixing shall be according to the manufacture's recommendations. Only enough water to permit placement and consolidation by rodding shall be used, and the material shall be struck-off flush with the adjacent pavement.

One core per location shall be tested by the Contractor for acceptance. The second verification core shall be labeled as per the Engineer's direction. The Engineer will take immediate possession of the verification cores. If the verification cores are damaged after the Engineer has gained possession, additional coring will be the responsibility of the Department.

The Contractor shall determine the bulk specific gravity ( $G_{mb}$ ) of the cores in accordance with Illinois-Modified AASHTO T 166.

The maximum specific gravity ( $G_{mm}$ ) used to determine the density of the cores will be based on the current moving average of four  $G_{mm}$  determinations.

All Department inspection procedures, including sampling and testing, form the basis for acceptance of the bituminous concrete. Any section of pavement that is obviously deficient shall be satisfactorily corrected and replaced.

A lot shall begin once the test-strip(s) has been completed and the AJMF has been determined. If the test strip is waived, a lot shall begin with the start of production.

Partial sublots will be handled as follows: If a subplot consists of 200 tons (180 metric tons) or less, its tonnage will be included in the previous subplot with no additional testing required. If a subplot consists of more than 200 tons (180 metric tons) , it will become a complete subplot requiring full subplot testing and will be used as a basis for payment.

Quality Assurance (QA) by the Engineer. QA will be according to the Special Provision, “Quality Control/Quality Assurance of Bituminous Concrete Mixtures”, Class I, except as follows:

- The overall minimum testing frequency by the Engineer will be 20 percent per lot. The Engineer may test any additional subplot samples for verification.
- The void verification tests will be calculated using the Contractor’s Gmm for the given subplot, provided that the State and Contractor’s Gmm are within the QC/QA precision guidelines of 0.026. If the State tested Gmm for the given lot is not within QC/QA tolerances, then the State will use their measured Gmm value.
- The State shall use the same Gmm as the Contractor to determine in-place density of the comparison samples.
- For non-pay factor parameters, differences between the Contractor’s and the Engineer’s split sample test results will be considered acceptable if within the Acceptable Limits of Precision, Class I.
- For pay factor parameters, Contractor’s and Engineer’s split sample test results will be considered acceptable if within the following limits:

| Test Parameter               | Acceptable Limits of Precision |       |
|------------------------------|--------------------------------|-------|
|                              | N = 1                          | N = 3 |
| Asphalt Content              | 0.3%                           | 0.25  |
| Voids                        | 1.2%                           | 1.0   |
| Density (Percent Compaction) | 1.2%                           | 1.0   |

\*\*Note: N=1 precision limits refer to the minimum comparison tolerance of a single split test comparison

N=3 precision limits refer to the minimum comparison tolerances of a 3 test average value. Each party's three (3) test average is based on the split results from the same sublots.

If the difference between QC and QA results are greater than the Acceptable Limits of Precision for N=1 above, the Engineer will immediately investigate the reason for the differences.

For cases where the differences can be attributed to equipment failure or test error, the following shall apply:

If the error was on the Contractor's sample, the Department will, within a lot, test sublots in an outward pattern from the sample tested above to determine the limits of the erroneous test results(s). All additional samples will be required to meet comparison tolerances and subject to acceptance by the QA procedure. The Department's test results will be used for pay on any subplot test results out of comparison limits. The Contractor may exercise the right to request the testing of the third split by the Bureau of Materials and Physical Research (BMPR). In which case BMPR's result will be used for pay. Corrective action shall be taken by the Contractor to correct the error prior to additional mix production.

If the error was on the Department's sample, corrective action will be taken and an additional subplot will be tested to verify that the error has been corrected.

For cases where the differences can not be attributed to equipment failure or test error, the following shall apply:

The Contractor may accept the Department results for pay. If the Contractor elects not to accept the Department results, the BMPR will conduct an N=3 comparison to determine pay. The three samples will consist of the failing test plus the samples occurring immediately before and after the failure. If the failure was on the first or last test of a lot, then the 2 samples occurring before or the two samples occurring after the failure will be tested. The three QC results shall be averaged and the three BMPR results will be averaged. The averages will be compared using the N=3 precision limits above. If the BMPR test result compares with the Contractor's result, the Contractor's result for the questioned subplot will be used for calculating payment. Otherwise, the BMPR's result will be used for payment.

The Contractor shall have 5 days from receiving QA results to decide to accept Department results or proceed to the N=3 evaluation.

If the Contractor elects not to accept the Department's result for density payment, then the Contractor shall obtain additional core(s) at the location(s) in question for BMPR N=3 testing. The core location(s) shall be determined by subtracting 1 foot (0.3m) from the random location using the same transverse offset.

Acceptance by the Engineer. Final acceptance for pay factor parameters will be based on the following:

- (a) Pay Factor Parameters. All acceptance test results for a lot will be analyzed collectively and statistically according to the Department's "Quality Level Analysis" document.

A lot containing material that fails to obtain a parameter pay factor of at least 0.8 will be rejected. The Contractor may submit a written request for acceptance of the material at a reduced price. Such request shall include an engineering analysis showing expected effects on the performance. The Engineer will determine whether or not the material may remain in place and the price reduction accepted. If it is determined that the material is to be removed from the project, the Contractor shall dispose of the non-specification materials in an environmentally acceptable manner at no cost to the Department.

A subplot containing material that fails to meet the following individual parameter ranges will be rejected:

| Parameter       | Acceptable Range |
|-----------------|------------------|
| Asphalt Content | AJMF $\pm$ 0.5   |
| Voids           | 1.5 – 6.5        |
| Density         | 87.0 – 98.5      |

The Contractor may submit a written request for acceptance of the material. The Engineer will determine whether the material may remain in-place or if an additional price reduction for the given lot should be considered. If it is determined that the material is not suitable to remain in place, the Contractor shall remove the materials at no cost to the Department. The new material shall be tested and replace the results from the initial material to be used for payment analysis.

The Contractor may elect to remove and replace any defective material. All new material will be sampled, tested, and evaluated for acceptance in lieu of the initial material. The results of tests on material not incorporated in the work will not be paid for or included in the Quality Level Analysis.

Asphalt content, void, and in-place density PWL will be determined per lot. The maximum pay factor obtainable is 1.030 for each pay factor parameter.

- (b) Non-Pay Factor Parameters.
  - (1) Validation of the Contractor’s quality control by the assurance process.
  - (2) The Contractor’s process control charts and actions.

**RIPRAP FOR STILLING BASINS**

This work consists of furnishing and placing a protective course of stone as riprap for erosion protection at location shown in the plans. This work shall be in compliance with Section 281 of the Standard Specifications and plan details.



Materials; materials shall meet the requirements stated in Art. 281.02.

Method of Measurement; Method of measurement shall be as stated in Art. 281.06.

Basis of Payment; This work will be paid for as stated in Art. 281.07. Earthwork and shaping required will not be paid for separately.

### **ROCKFILL (REPLACEMENT)**

This work consists of replacing the unsuitable removal at culverts with a layer of crushed stone of the size and thickness shown in the plans and plan details.

The material shall meet Quality Designation #B as required in Article 1005.01 of the Standard Specifications for Road and Bridge Construction. Gradation shall be as shown in plan detail 'Special Soil Treatment'. It shall not contain objectionable quantities of dirt, sand, clay or rock fines.

This work will be measured and paid for at the contract unit price per cubic yard for ROCKFILL (REPLACEMENT).

### **POROUS GRANULAR MATERIAL**

This work shall consist of furnishing, transporting and placing porous granular material in areas of bedrock removal for culvert construction.

The material shall be crushed stone meeting gradation CA-5 or CA-7, as required in Article 1004.01 and requirements of Article 1004.06 of the Standard Specifications for Road and Bridge Construction.

This work will be measured and paid for at the contract unit price per cubic yard for POROUS GRANULAR MATERIAL.

### **DRAINAGE STRUCTURE TO BE REMOVED**

This work shall consist of the complete removal and proper disposal of the Inlets Type A with Median Inlets at the locations shown in the plans.

This work will be measured and paid for at the contract unit price each for DRAINAGE STRUCTURE TO BE REMOVED.

### **TEMPORARY PIPE CULVERTS**

End sections for temporary pipe culverts shall be supplied at the locations shown in the plans. End sections, where required are included in the plan quantities per foot for the type and size of pipe specified.

### **PIPE HANDRAIL, SPECIAL**

This work shall consist of furnishing and installing the welded pipe pedestrian handrail as shown on the plans and described in this Special Provision. Except as noted herein, this work shall be in accordance with the applicable provisions of Section 510 of the Standard Specifications.

The steel railing, connection bolts and toeboard shall be hot dip galvanized as noted on the plans.

This work shall include furnishing and installing the steel toe boards as shown on the plans.

This work shall be paid for at the contract unit price per foot for PIPE HANDRAIL, SPECIAL, which price shall include all materials, fabrication, transportation and erection.

### **CHAIN LINK FENCE, 10' (SPECIAL)**

This work consists of constructing a chain link fence, to deter animals from crossing IL 336, in accordance with applicable portions of Section 664 of the Standard Specifications, Highway Standard 664001, and plan details.

The chain link shall be a standard 10' fence with 2' buried below the ground surface. Posts height and hardware will be as required for a standard 8' fence. Provide a trencher capable of producing a 2' deep trench, or other equipment as approved by the Engineer. The 10 ft fence shall be installed with 2 ft of the fence buried vertically in a trench, after installation the trench shall be backfilled and compacted to the satisfaction of the Engineer.

Method of Measurement. Method of measurement shall be as described in Art. 664.12

"

Basis of Payment. The work of furnishing all materials, equipment, labor and installing the complete chain link fence will be paid for at the contract unit price per foot for CHAIN LINK FENCE, 10' (SPECIAL).

### **SUB-BALLAST**

Sub-ballast shall be crushed gravel or crushed stone with a minimum of 75% of the material having two fractured faces. Sub-ballast must meet the quality requirements of ASTM Designation D 1241 as approved by the Engineer. Material shall be placed in lifts no greater than 6 inches loose and compacted to 95% of standard laboratory density.

Sub-ballast shall meet gradation requirements for aggregate base course per Article 1004.04 of the Standard Specifications.

Method of Measurement. Sub-ballast will be measured for payment compacted in place and computed in cubic yards. Sub-ballast placed beyond the limits shown in the plans will not be measured for payment.

Basis of Payment. This work will be paid for at the contract unit price per cubic yard for SUB-BALLAST.

### **SHOO-FLY EMBANKMENT**

Embankment material shall be free of organics, debris, and frozen material obtained from the location shown in the plans. Embankment slopes shall be compacted and dressed to provide a uniform dense slope. Each layer in the embankment shall not exceed 6 " in loose depth and shall be compacted to a density of 95% of the maximum standard laboratory density and not more than +4 percentage points above the optimum moisture content in accordance with ASTM Designation: 698.

This work will not be paid for separately, but shall be included in the unit cost of EARTH & FURNISHED EXCAVATION.

### **TOPSOIL EXCAVATION**

This work shall consist of excavating and stockpiling 12 " topsoil removed from the proposed shoo-fly alignment. Topsoil shall also be removed from the contractors access/haul road on the temporary easement. All topsoil is to be returned to the temporary easements at the conclusion of the contract. Suggested topsoil stockpile locations are shown on the plans. At the completion of the stockpiling operation erosion control fence shall be placed, and maintained, as shown in the plans or as directed by the Engineer.

Method of Measurement. Topsoil Excavation will be measured in cubic yards in its original position and volume computed by average end areas.

Basis of Payment. The excavation and stockpiling of topsoil from the shoo-fly alignment shall be paid for at the contract unit price per cubic yard for TOPSOIL EXCAVATION. The erosion control fence will be paid for separately.

### **VIBRATORY ROLLERS**

Vibratory rollers shall not be used within 400 feet of a residence.

### **RODENT EXTERMINATION**

This work under this special provision consists of the extermination of rodents in and around the buildings prior to demolition. This work shall be performed by an Illinois licensed exterminator at least three (3) weeks in advance of beginning asbestos removal and /or demolition.

The cost of rodent extermination will not be paid for separately, but shall be included in the price per lump sum of the BUILDING REMOVAL pay items. Clean-up will be to the satisfaction of the Engineer.

## **REMOVING EXISTING SEPTIC TANK**

Description. This work shall consist of the removal and disposal off the right-of-way of the existing septic tank, its contents, and the waste supply line as directed by the Engineer.

Construction requirements. The contents of the tank shall first be removed by an approved operator. The disposal of the undesirable material (liquid and solid waste material) from the tank shall be done in a manner which meets the current standards of the County Health Department and the Environmental Protection Agency and to the satisfaction of the Engineer. The remaining hole shall be cleaned out and filled with a granular material, and/or selected earth material approved by the Engineer, placed and compacted to the satisfaction of the Engineer. The field tile leads shall be removed, where necessary, or abandoned and blocked with masonry as directed by the Engineer.

The location of the septic tank shall be determined in the field.

Basis of Payment. This work shall be paid for at the contract unit price per each for REMOVING EXISTING SEPTIC TANK, and no additional compensation will be allowed.

## **ALKALI-SILICA REACTION (ASR) MITIGATION**

Description. Mix Design Material Selection Requirements Based on Fine Aggregate Alkali-Silica Reactivity. This specification applies to all cast-in-place bridge super and sub-structure concrete as well as bridge approach pavements.

Fine Aggregate or Fine Aggregate Blend has an expansion less than 0.10% per ASTM C 1260.

Option 1: No maximum alkali content shall apply to the cement or finely divided minerals, but the coarse aggregate or coarse aggregate blend shall have an expansion equal to or less than 0.10% per ASTM C 1260.

Option 2: No maximum alkali content shall apply to the cement, but the coarse aggregate or coarse aggregate blend shall have an expansion equal to or less than 0.20% per ASTM C 1260, and each finely divided mineral used shall have a maximum alkali content of 1.50%.

Fine Aggregate or Fine Aggregate Blend has an expansion of 0.10% to 0.20% per ASTM C 1260.

Option 1: No maximum alkali content shall apply to the cement, but the coarse aggregate or coarse aggregate blend shall have an expansion equal to or less than 0.10% per ASTM C 1260, and each finely divided mineral used shall have a maximum alkali content of 1.50%.

Option 2: No maximum alkali content shall apply to the cement, but the coarse aggregate or coarse aggregate blend shall have an expansion equal to or less than 0.20% per ASTM C 1260, and each finely divided mineral used shall have a maximum alkali content of 1.00%.

Fine Aggregate or Fine Aggregate Blend has an expansion greater than 0.20% but does not exceed 0.30% per ASTM C 1260.

Option 1: No maximum alkali content shall apply to the cement, but the coarse aggregate or coarse aggregate blend shall have an expansion equal to or less than 0.10% per ASTM C 1260, and ground granulated blast-furnace slag with a maximum alkali content of 1.00% shall be used. The ground granulated blast-furnace slag shall replace 25% of the cement factor at 1:1. In lieu of ground granulated blast-furnace slag, Class F fly ash may be used if it has a maximum alkali content of 1.00%. The Class F fly ash shall replace 15% of the cement factor at 1.5:1.

Option 2: A maximum alkali content of 0.60% shall apply to the cement, the coarse aggregate or coarse aggregate blend shall have an expansion equal to or less than 0.20% per ASTM C 1260, and ground granulated blast-furnace slag with a maximum alkali content of 1.00% shall be used. The ground granulated blast-furnace slag shall replace 25% of the cement factor at 1:1. In lieu of ground granulated blast-furnace slag, Class F fly ash may be used if it has a maximum alkali content of 1.00%. The Class F fly ash shall replace 15% of the cement factor at 1.5:1.

### **Unacceptable Aggregate Alkali-Silica Reactivity**

No fine aggregate or fine aggregate blend with an expansion greater than 0.30% per ASTM C 1260 shall be used. No coarse aggregate or coarse aggregate blend with an expansion greater than 0.20% per ASTM C 1260 shall be used.

### **Department Testing for Alkali-Silica Reactivity**

No placing of concrete shall begin before the Department has completed testing to determine the ASTM C 1260 expansion for each aggregate. For an aggregate blend, the expansion will be calculated as follows:

Aggregate Blend Expansion =  $(a/100 \times A) + (b/100 \times B) + (c/100 \times C) + \dots$

Where: a, b, c ... = percent of aggregate blend; A, B, C ... = aggregate ASTM C1260 expansion

Basis of Payment. No additional compensation will be directly provided, but shall be considered to be included in the unit prices of the associated pay items.

### **BUILDING REMOVAL - CASE I (NON-FRIABLE AND FRIABLE ASBESTOS ABATEMENT) (BDE)**

Effective: September 1, 1990

Revised: August 1, 2001

**BUILDING REMOVAL:** This item shall consist of the removal and disposal of building(s), together with all foundations, retaining walls, and piers, down to a plane 300 mm (1 ft.) below the ultimate or existing grade in the area and also all incidental and collateral work necessary to complete the removal of the building(s) in a manner approved by the Engineer. Any holes, such as basements, shall be filled with a suitable material. The building(s) are identified as follows:

| <u>Building No.</u> | <u>Parcel No.</u> | <u>Location</u>                     | <u>Description</u>  |
|---------------------|-------------------|-------------------------------------|---|
| Bldg. No. 4         | 409U005           | 2860 U.S. RTE. 136<br>Tennessee, IL | 1968 sq. ft. one and one-half story wood and masonry structure with a basement and an asphalt shingle roof. Interior walls are hard plaster. Ceilings are hard plaster and Lay-in ceiling tile. Floors are Wood covered with vinyl floor tile, carpet and finished hard-wood flooring. The exterior is masonry and wood siding. |

The basement contains four (4) heating oil tanks. These tanks and their contents shall be removed and properly disposed of.

Discontinuance of Utilities: The Contractor shall arrange for the discontinuance of all utility services that serve the building(s) according to the respective requirements and regulations of the City, County, or utility companies involved. The Contractor shall disconnect and seal, in an approved manner, all service outlets that serve any building(s) he/she is to remove.

Signs: Immediately upon execution of the contract and prior to the wrecking of any structures, the Contractor shall be required to paint or stencil, in contrasting colors of an oil base paint, on all four sides of each residence and two opposite sides of other structures, the following sign:

PROPERTY ACQUIRED FOR  
HIGHWAY CONSTRUCTION  
TO BE DEMOLISHED BY THE  
  
VANDALS WILL BE PROSECUTED

The signs shall be positioned in a prominent location on the structure so that they can be easily seen and read and at a sufficient height to prevent defacing. The Contractor shall not paint signs nor start demolition of any building(s) prior to the time that the State becomes the owner of the respective building(s).

All friable asbestos shall be removed from the building(s) prior to demolition. The Contractor has the option of removing the non-friable asbestos prior to demolition or demolishing the building(s) with the non-friable asbestos in place. Refer to the Special Provisions titled "Asbestos Abatement (General Conditions)", "Removal and Disposal of Friable Asbestos Building No. 4", and "Removal and Disposal of Non-Friable Asbestos Building No. 4" contained herein.

Basis of Payment: This work will be paid for at the contract lump sum unit price for BUILDING REMOVAL, numbers as listed above, which price shall be payment in full for complete removal of the buildings and structures, including any necessary backfilling material as specified herein.

The lump sum unit price(s) for this work shall represent the cost of demolition and disposal assuming all asbestos, friable and non-friable, is removed prior to demolition. Any salvage value shall be reflected in the contract unit price for this item.

EXPLANATION OF BIDDING TERMS: Three separate contract unit price items have been established for the removal of each building. They are:

- 1 BUILDING REMOVAL NO. 4
- 2 REMOVAL AND DISPOSAL OF FRIABLE ASBESTOS, BUILDING NO. 4
- 3 REMOVAL AND DISPOSAL OF NON-FRIABLE ASBESTOS, BUILDING NO. 4

The Contractor shall have two options available for the removal and disposal of the non-friable asbestos.

The pay item for removal and disposal of non-friable asbestos will not be deleted regardless of the option chosen by the Contractor.

ASBESTOS ABATEMENT (GENERAL CONDITIONS): This work consists of the removal and disposal of friable and non-friable asbestos from the building(s) to be demolished. All work shall be done according to the requirements of the U.S. Environmental Protection Agency (USEPA), the Illinois Environmental Protection Agency (IEPA), the Occupational Safety and Health Administration (OSHA), the Special Provisions for "Removal and Disposal of Friable Asbestos, Building No.4" and "Removal and Disposal of Non-Friable Asbestos, Building No.4 ", and as outlined herein.

Sketches indicating the location of Asbestos Containing Material (ACM) are included in the proposal on pages thru . Also refer to the Materials Description Table on page for a brief description and location of the various materials. Also included is a Materials Quantities Table on page . This table states whether the ACM is friable or non-friable and gives the approximate quantity. The quantities are given only for information and it shall be the Contractor's responsibility to determine the exact quantities prior to submitting his/her bid.

The work involved in the removal and disposal of friable asbestos, and non-friable asbestos if done prior to demolition, shall be performed by a Contractor or Sub-Contractor pre-qualified with the Illinois Capital Development Board.

The Contractor shall provide a shipping manifest, similar to the one shown on page 57, to the Engineer for the disposal of all ACM wastes.

Permits: The Contractor shall apply for permit(s) in compliance with applicable regulations of the Illinois Environmental Protection Agency. Any and all other permits required by other federal, state, or local agencies for carrying on the work shall be the responsibility of the Contractor. Copies of these permits shall be sent to the district office and the Engineer.

Notifications: The "Demolition/Renovation Notice" form, which can be obtained from the IEPA office, shall be completed and submitted to the address listed below at least 10 days prior to commencement of any asbestos removal or demolition activity. Separate notices shall be sent for the asbestos removal work and the building demolition if they are done as separate operations.

Asbestos Demolition/Renovation Coordinator  
Illinois Environmental Protection Agency  
Division of Air Pollution Control

P. O. Box 19276  
Springfield, Illinois 62794-9276  
(217)785-1743

Notices shall be updated if there is a change in the starting date or the amount of asbestos changes by more than 20 percent.

Submittals:

- A. All submittals and notices shall be made to the Engineer except where otherwise specified herein.
- B. Submittals that shall be made prior to start of work:
  1. Submittals required under Asbestos Abatement Experience.
  2. Submit documentation indicating that all employees have had medical examinations and instruction on the hazards of asbestos exposure, on use and fitting of respirators, on protective dress, on use of showers, on entry and exit from work areas, and on all aspects of work procedures and protective measures as specified in Worker Protection Procedures.
  3. Submit manufacturer's certification stating that vacuums, ventilation equipment, and other equipment required to contain airborne fibers conform to ANSI 29.2.
  4. Submit to the Engineer the brand name, manufacturer, and specification of all sealants or surfactants to be used. Testing under existing conditions will be required at the direction of the Engineer.
  5. Submit proof that all required permits, site locations, and arrangements for transport and disposal of asbestos-containing or asbestos-contaminated materials, supplies, and the like have been obtained (i.e., a letter of authorization to utilize designated landfill).
  6. Submit a list of penalties, including liquidated damages, incurred through noncompliance with asbestos abatement project specifications.
  7. Submit a detailed plan of the procedures proposed for use in complying with the requirements of this specification. Include in the plan the location and layout of decontamination units, the sequencing of work, the respiratory protection plan to be used during this work, a site safety plan, a disposal plan including the location of an approved disposal site, and a detailed description of the methods to be used to control pollution. The plan shall be submitted to the Engineer prior to the start of work.
  8. Submit proof of written notification and compliance with Paragraph "Notifications."



C. Submittals that shall be made upon completion of abatement work:

1. Submit copies of all waste chain-of-custodies, trip tickets, and disposal receipts for all asbestos waste materials removed from the work area;
2. Submit daily copies of work site entry logbooks with information on worker and visitor access;
3. Submit logs documenting filter changes on respirators, HEPA vacuums, negative pressure ventilation units, and other engineering controls; and
4. Submit results of any bulk material analysis and air sampling data collected during the course of the abatement including results of any on-site testing by any federal, state, or local agency.

Certificate of Insurance:

- A. The Contractor shall document general liability insurance for personal injury, occupational disease and sickness or death, and property damage.
- B. The Contractor shall document current Workmen's Compensation Insurance coverage.
- C. The Contractor shall supply insurance certificates as specified by the Department.

Asbestos Abatement Experience:

- A. Company Experience: Prior to starting work, the Contractor shall supply evidence that he/she has been pre-qualified with the Illinois Capital Development Board and that he/she has been included on the Illinois Department of Public Health's list of approved Contractors.
- B. Personnel Experience:
  1. For Superintendent, the Contractor shall supply:
    - a. Evidence of knowledge of applicable regulations in safety and environmental protection is required as well as training in asbestos abatement as evidenced by the successful completion of a training course in supervision of asbestos abatement as specified in 40 CFR 763, Subpart E, Appendix C, EPA Model Contractor Accreditation Plan. A copy of the certificate of successful completion shall be provided to the Engineer prior to the start of work.
    - b. Documentation of experience with abatement work in a supervisory position as evidenced through supervising at least two asbestos abatement projects; provide names, contact, phone number, and locations of two projects in which the individual(s) has worked in a supervisory capacity.

2. For workers involved in the removal of friable and non-friable asbestos, the Contractor shall provide training as evidenced by the participation and successful completion of an accredited training course for asbestos abatement workers as specified in 40 CFR 763, Subpart E, Appendix C, EPA Model Contractor Accreditation Plan. A copy of the certificate of successful completion shall be provided to all employees who will be working on this project.

ABATEMENT AIR MONITORING: The Contractor shall comply with the following:

- A. Personal Monitoring: All personal monitoring shall be conducted per specifications listed in OSHA regulation, Title 29, Code of Federal Regulation 1926.58. All area sampling shall be conducted according to 40 CFR Part 763.90. All air monitoring equipment shall be calibrated and maintained in proper operating condition. Excursion limits shall be monitored daily. Personal monitoring is the responsibility of the Contractor. Additional personal samples may be required by the Engineer at any time during the project.
- B. Contained Work Areas for Removal of Friable Asbestos: Area samples shall be collected for the department within the work area daily. A minimum of one sample shall be taken outside of the abatement area removal operations. The Engineer will also have the option to require additional personal samples and/or clearance samples during this type of work.
- C. Interior Non-Friable Asbestos-Containing Materials: The Contractor shall perform personal air monitoring during removal of all non-friable Transite and floor tile removal operations. The Engineer will also have the option to require additional personal samples and/or clearance samples during this type of work.
- D. Exterior Non-Friable Asbestos-Containing Materials: The Contractor shall perform personal air monitoring during removal of all non-friable cementitious panels, piping, roofing felts, and built up roofing materials that contain asbestos.

The Contractor shall conduct down wind area sampling to monitor airborne fiber levels at a frequency of no less than three per day.

D. Air Monitoring Professional

1. All air sampling shall be conducted by a qualified Air Sampling Professional supplied by the Contractor. The Air Sampling Professional shall submit documentation of successful completion of the National Institute for Occupational Safety and Health (NIOSH) course #582 - "Sampling and Evaluating Airborne Asbestos Dust".
2. Air sampling shall be conducted according to NIOSH Method 7400. The results of these tests shall be provided to the Engineer within 24 hours of the collection of air samples.

REMOVAL AND DISPOSAL OF FRIABLE ASBESTOS, BUILDING NO.4 : This work consists of the removal and disposal of all friable asbestos from the building(s) prior to demolition. The work shall be done according to the Special Provision titled "Asbestos Abatement (General Conditions)" and as outlined herein.

This work will be paid for at the contract unit price per lump sum for REMOVAL AND DISPOSAL OF FRIABLE ASBESTOS, BUILDING NO.4 , as shown, which price shall include furnishing all labor, materials, equipment and services required to remove and dispose of the friable asbestos.

REMOVAL AND DISPOSAL OF NON-FRIABLE ASBESTOS, BUILDING NO.4 : The Contractor has the option of removing and disposing of the non-friable asbestos prior to demolition of the building(s) or demolishing the building(s) with the non-friable asbestos in place.

Option #1 - If the Contractor chooses to remove all non-friable asbestos prior to demolition, the work shall be done according to the Special Provision titled "Asbestos Abatement (General Conditions)".

Option #2 - If the Contractor chooses to demolish the building(s) with the non-friable asbestos in place, the following provisions shall apply:

1. Continuously wet all non-friable ACM and other building debris with water during demolition.
2. Dispose of all demolition debris as asbestos containing material by placing it in lined, covered transport haulers and placing it in an approved landfill.

This work will be paid for at the contract unit price per lump sum for REMOVAL AND DISPOSAL OF NON-FRIABLE ASBESTOS, BUILDING NO. 4, as shown.

The cost for this work shall be determined as follows:

Option #1 -Actual cost of removal and disposal of non-friable asbestos.

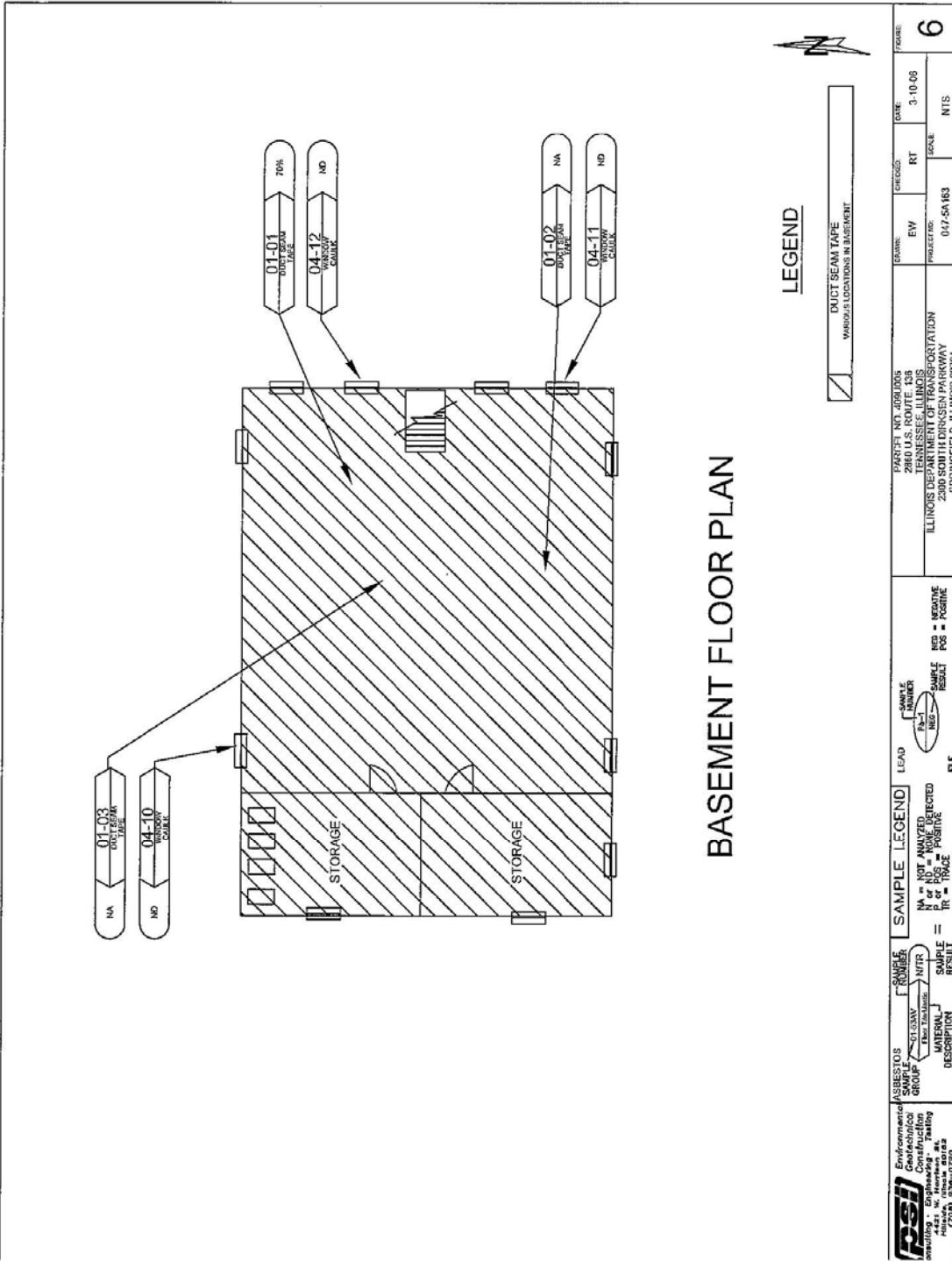
Option #2 -The difference in cost between removing and disposing of the building if all non-friable asbestos is left in place and removing and disposing of the building assuming all non-friable asbestos is removed prior to demolition.

The cost of removing and disposing of the building(s), assuming all asbestos, friable and non-friable is removed first, shall be represented by the pay item "BUILDING REMOVAL NO. 4".

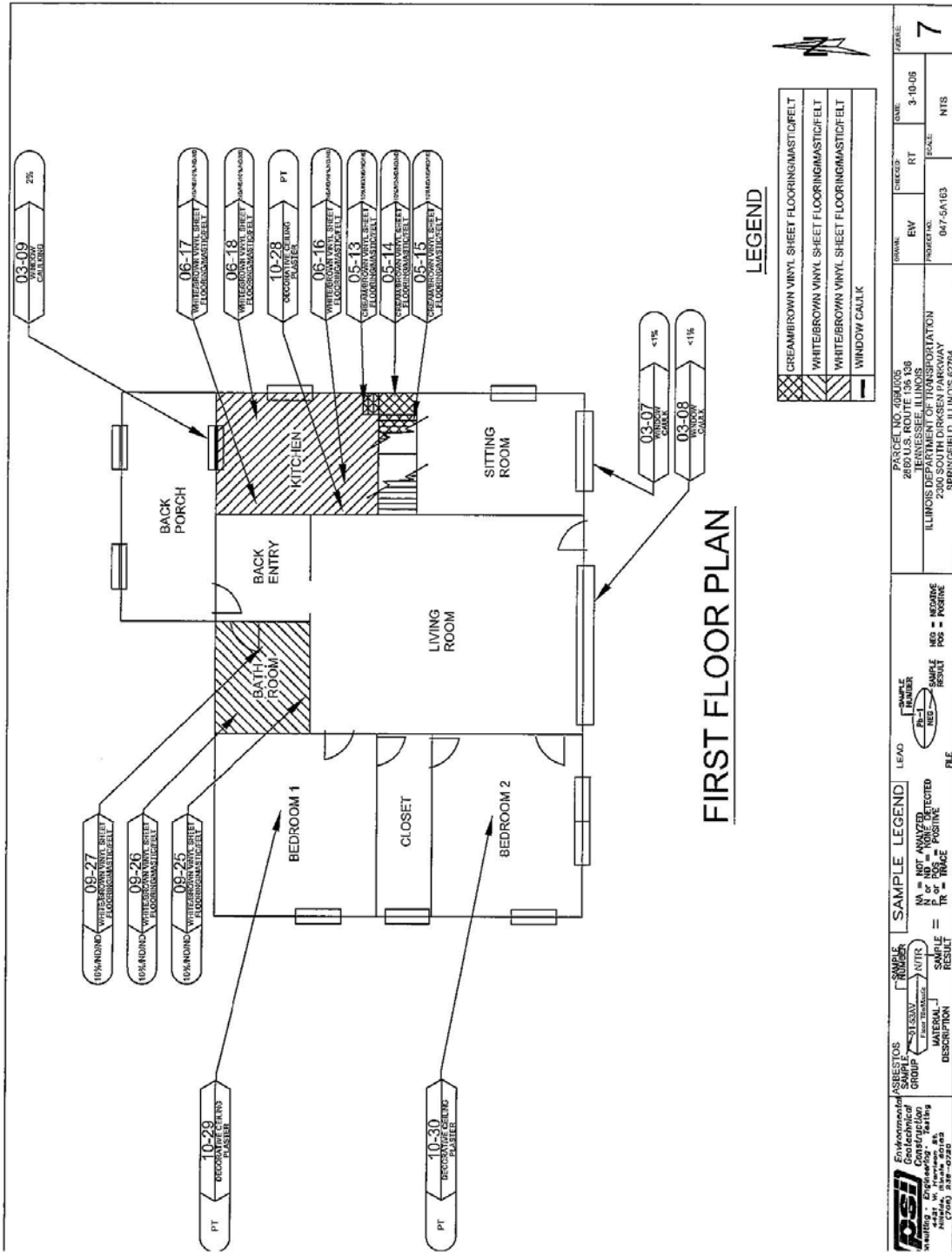
Regardless of the option chosen by the Contractor, this pay item will not be deleted, nor will the pay item BUILDING REMOVAL NO. 4 be deleted.

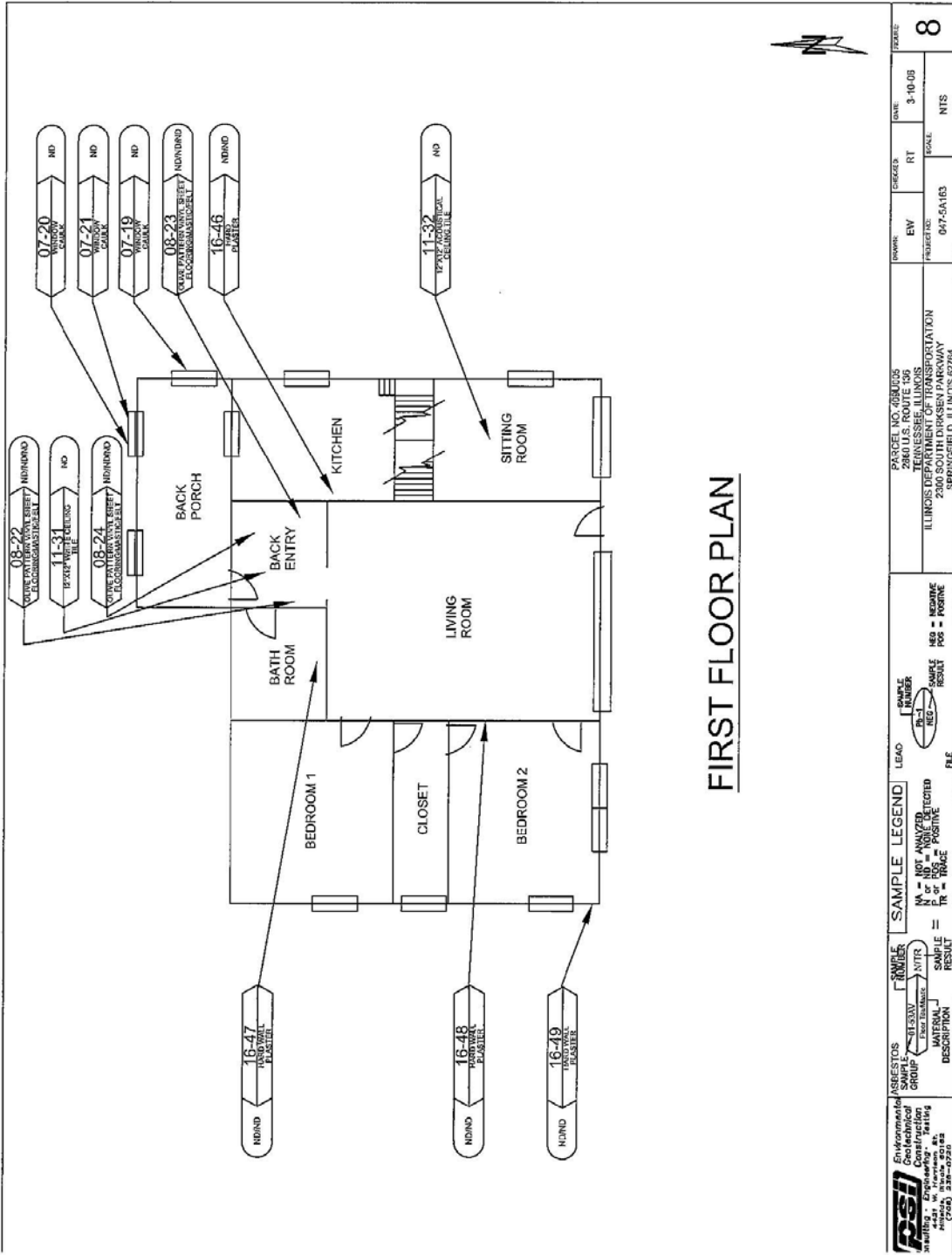
Appendix A

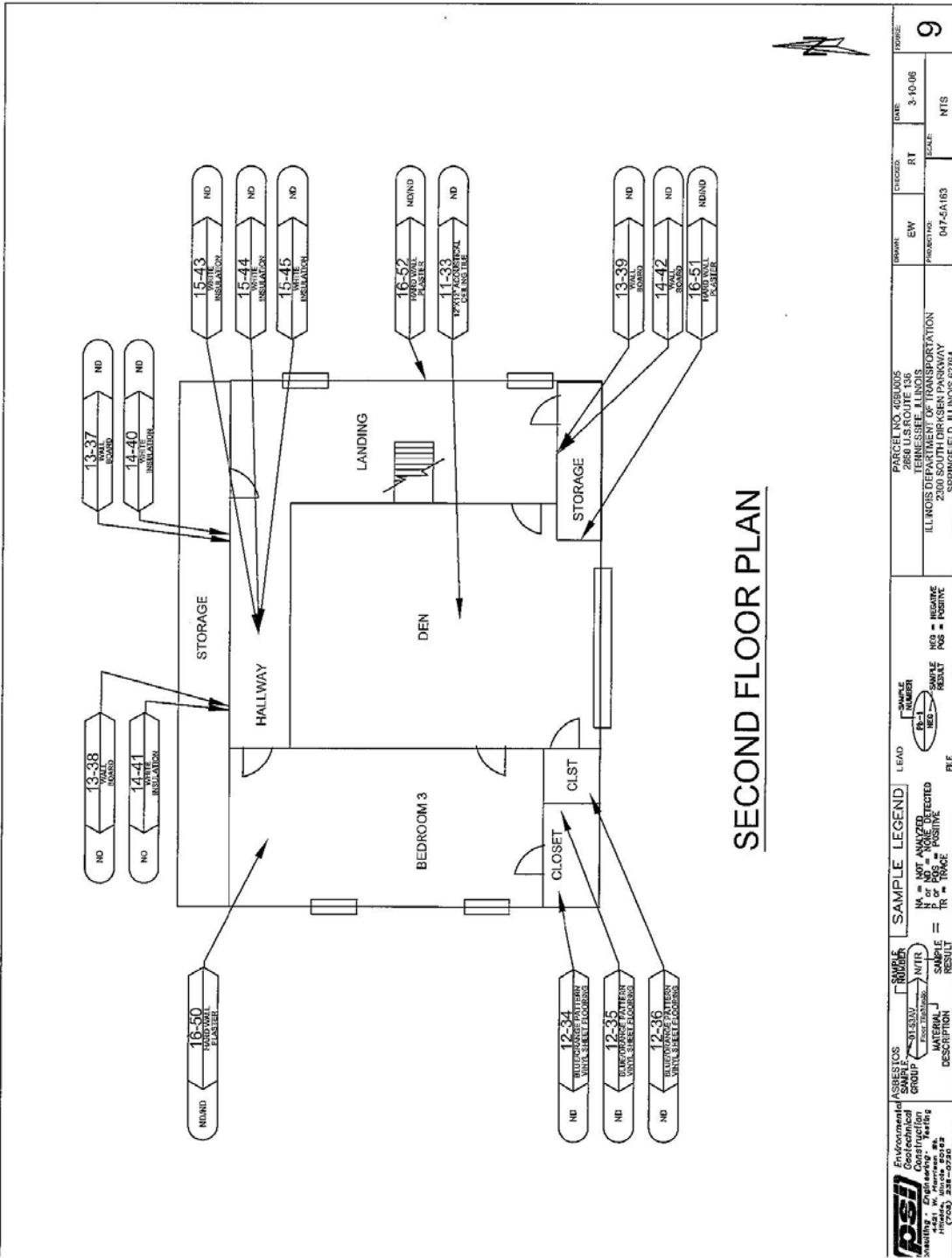
Building Drawings – Asbestos Locations Building Removal No. 4



|   |   |   |   |   |   |                           |                |                  |                     |
|---|---|---|---|---|---|---------------------------|----------------|------------------|---------------------|
| <b>psii</b><br>Environmental<br>Geotechnical<br>Construction<br>Health, Safety & Building<br>1425 S. Jefferson St.<br>Chicago, IL 60607<br>(773) 328-0720 | ASBESTOS<br>SAMPLE<br>GROUP                                     | SAMPLE<br>NUMBER<br>(NTR)                                       | SAMPLE<br>RESULT<br>(NTR)                                       | LEAD<br>SAMPLE<br>RESULT<br>(NTR)                               | PARTIAL NO. 4090005<br>2840 U.S. ROUTE 138<br>TENNESSEE, ILLINOIS<br>ILLINOIS REGISTRATION<br>2240 SOUTH MICHIGAN AVE. SUITE 200<br>SPRINGFIELD, ILLINOIS 62762 | DRAWN:<br>EW              | CHECKED:<br>RT | DATE:<br>3-10-05 | FIGURE:<br><b>6</b> |
|   | NA = NOT ANALYZED<br>P = POSITIVE<br>N = NEGATIVE<br>TR = TRACE | NA = NOT ANALYZED<br>P = POSITIVE<br>N = NEGATIVE<br>TR = TRACE | NA = NOT ANALYZED<br>P = POSITIVE<br>N = NEGATIVE<br>TR = TRACE | NA = NOT ANALYZED<br>P = POSITIVE<br>N = NEGATIVE<br>TR = TRACE | NA = NOT ANALYZED<br>P = POSITIVE<br>N = NEGATIVE<br>TR = TRACE   | PROJECT NO.:<br>017-56163 | SCALE:<br>NTS  |                  |                     |



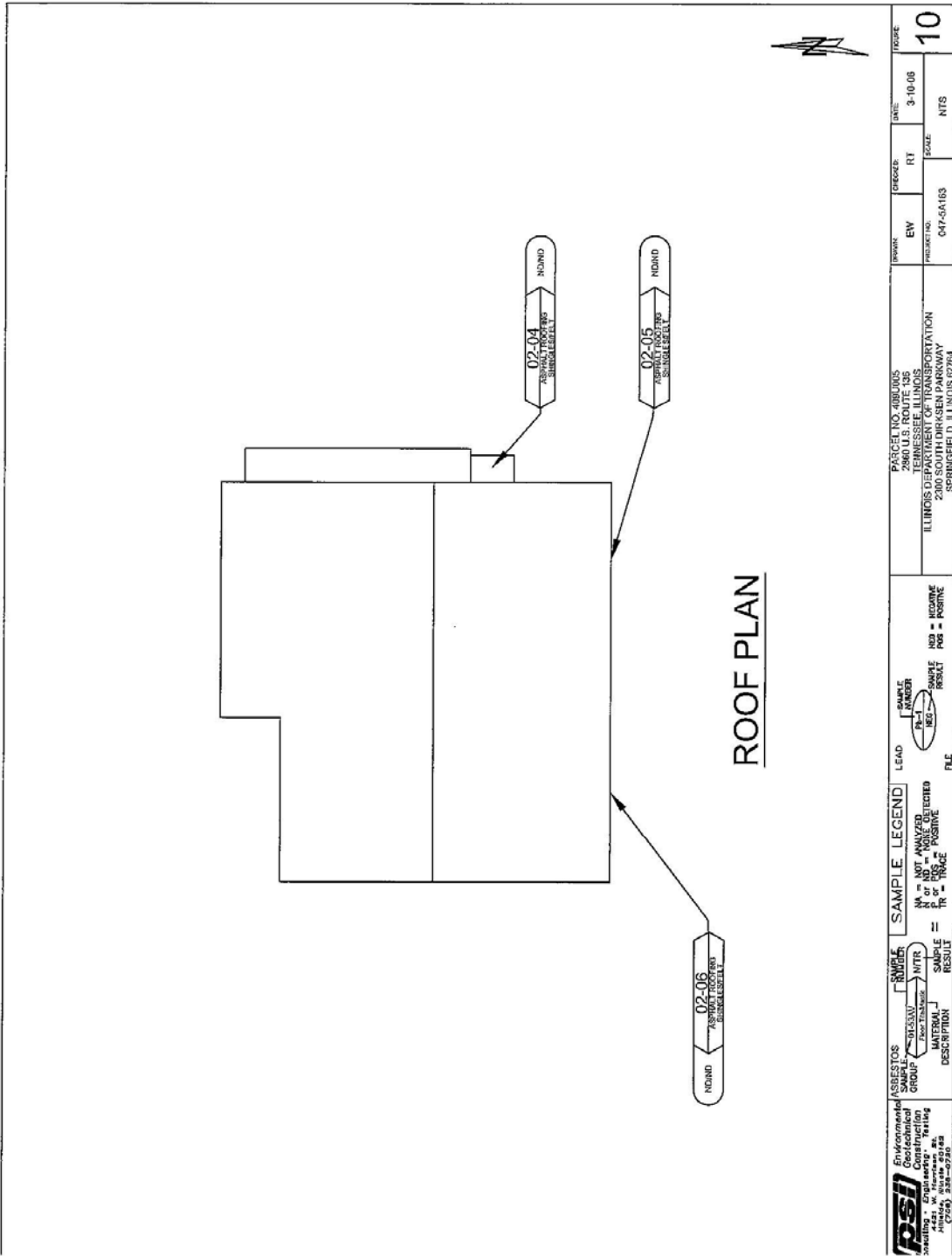




**SECOND FLOOR PLAN**

|   |   |   |                            |                        |
|---|---|---|----------------------------|------------------------|
| <b>Environmental</b><br><b>PSI</b><br>Environmental<br>Geotechnical<br>Construction<br>Materials<br>1441 W. Interstate 88<br>Maitland, FL 32751<br>(727) 328-0720 | <b>ADDRESS</b><br>2850 U.S. ROUTE 136<br>SPRINGFIELD, ILLINOIS 62784  | <b>PARCEL NO.</b><br>425B0005   | <b>DATE</b><br>3-10-06     | <b>FIGURE</b><br>9     |
|   | <b>CLIENT</b><br>ILLINOIS DEPARTMENT OF TRANSPORTATION<br>2300 SOUTH DIRKSEN PARKWAY<br>SPRINGFIELD, ILLINOIS 62764 | <b>OWNER</b><br>EW  | <b>ENGINEER</b><br>RT      | <b>SCALE</b><br>NTS    |
| <b>LEAD</b><br>YES = NOT ANALYZED<br>NO = ANALYZED<br>P = POSITIVE<br>N = NOT POSITIVE<br>IR = TRACE  | <b>SAMPLE LEGEND</b><br>YES = NOT ANALYZED<br>NO = ANALYZED<br>P = POSITIVE<br>N = NOT POSITIVE<br>IR = TRACE       | <b>RESULTS</b><br>YES = NOT ANALYZED<br>NO = ANALYZED<br>P = POSITIVE<br>N = NOT POSITIVE<br>IR = TRACE | <b>FILE</b><br>PS-1<br>163 | <b>DATE</b><br>3-10-06 |





|   |                                       |                          |                      |   |  |   |
|---|---------------------------------------|--------------------------|----------------------|---|--|---|
| <b>Environmental Geotechnical</b><br><b>PSI</b><br>Consulting & Engineering, Inc.<br>1421 W. Horward Ave.<br>Peoria, IL 61614<br>(309) 698-0720 | <b>ASBESTOS</b><br>ANALYSIS<br>GROUP: | <b>SAMPLE</b><br>NUMBER: | <b>LEAD</b><br>FILE: | <b>SAMPLE LEGEND</b><br>N = NOT ANALYZED<br>ND = NOT DETECTED<br>P = POSITIVE<br>TR = TRACE | <b>DATE:</b> 3-10-05<br><b>SCALE:</b> NTS  | <b>FIGURE:</b> 10                         |
|   | MATERIAL:                             | DESCRIPTION:             | ANALYZED:            | RESULT:   | <b>PROJECT NO.:</b> 047-04163<br><b>CLIENT:</b> ILLINOIS DEPARTMENT OF TRANSPORTATION<br>2300 SOUTH DIRKSEN PARKWAY<br>SPRINGFIELD, ILLINOIS 62764 | <b>DRIVER:</b> RT<br><b>DATE:</b> 3-10-05 |

Appendix B, C

Material Description and Quantity Table

| Material Description                                | Percent ACM     | Location                         | Quantity, condition,<br>Material number  |
|---|-----------------|----------------------------------|--|
| Duct Seam Tape                                      | 70%             | Basement                         | 15 L.F.; Good; MTL # 01<br>Friable       |
| Window caulk  | 2%              | House windows                    | 576 L.F.; Good; MTL # 03<br>Non-Friable  |
| Cream/brown vinyl sheet<br>flooring/<br>mastic/felt | 10%<br>ND<br>ND | side entrance<br>basement stairs | 100 sq. ft.; Good; MTL#05<br>Non-Friable |
| white/brown vinyl sheet<br>flooring/mastic/felt     | 10%<br>ND       | kitchen                          | 200 sq. ft.; Good; MTL#06<br>Non-Friable |
| white/brown vinyl sheet<br>flooring/mastic/felt     | 10%<br>ND       | bathroom                         | 488 sq. ft.; Good; MTL#09<br>Non-Friable |

APPENDIX D  
 SHIPPING MANIFEST  
 Generator

|  |                   |                         |
|--|-------------------|-------------------------|
| 1. Work Site Name and Mailing Address  | Owner's Name      | Owner's Telephone No.   |
| 2. Operator's Name and Address   |                   | Operator's Telephone No |
| 3. Waste Disposal Site (WDS) Name Mailing Address, and Physical Site Location  | WDS Telephone No. |                         |
| 4. Name and Address of Responsible Agency  |                   |                         |
| 5. Description of Materials  |                   |                         |
| 6. Containers  | No.               | Type                    |
| 7. Total Quantity  | M3                | (Yd3)                   |
| 8. Special Handling Instructions and Additional Information  |                   |                         |
| 9. OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and government regulations. |                   |                         |
| Printed/Typed Name & Title   | Signature         | Month Day Year          |

Transporter

|   |         |           |                |
|---|---------|-----------|----------------|
| 10. Transporter 1 (Acknowledgement of Receipt of Materials) |         |           |                |
| Printed/Typed Name & Title and Telephone No.                | Address | Signature | Month Day Year |
| 11. Transporter 2 (Acknowledgement of Receipt of Materials) |         |           |                |
| Printed/Typed Name & Title and Telephone No.                | Address | Signature | Month Day Year |

Disposal Site

|   |           |                |
|---|-----------|----------------|
| 12. Discrepancy Indication Space  |           |                |
| 13. Waste Disposal Site Owner or Operator: Certification of Receipt of Asbestos Materials Covered By This Manifest Except as Noted in Item 12 |           |                |
| Printed/Typed Name & Title  | Signature | Month Day Year |

### Appendix D Instructions

#### Waste Generator Section (Items 1-9)

1. Enter the name of the facility at which asbestos waste is generated and the address where the facility is located. In the appropriate spaces, also enter the name of the owner of the facility and the owner's phone number.
2. If a demolition or renovation, enter the name and address of the Company and authorized agent responsible for performing the asbestos removal. In the appropriate spaces, also enter the phone number of the operator.
3. Enter the name, address, and physical site location of the waste disposal site (WDS) that will be receiving the asbestos materials. In the appropriate spaces, also enter the phone number of the WDS. Enter "on-site" if the waste will be disposed of on the generator's property.
4. Provide the name and address of the local, State, or EPA Regional Office responsible for administering the asbestos NESHAP program.
5. Indicate the types of asbestos waste materials generated. If from a demolition or renovation, indicate the amount of asbestos that is
  - Friable asbestos material
  - Nonfriable asbestos material
6. Enter the number of containers used to transport the asbestos materials listed in Item 5. Also enter one of the following container codes used in transporting each type of asbestos material (specify any other type of container used if not listed below):
  - DM -Metal drums, barrels
  - DP -Plastic drums, barrels
  - BA -6 mil plastic bags or wrapping
7. Enter the quantities of each type of asbestos material removed in units of cubic meters (cubic yards).
8. Use this space to indicate special transportation, treatment, storage or disposal or Bill of Lading information. If an alternate waste disposal site is designated, note it here. Emergency response telephone numbers or similar information may be included here.
9. The authorized agent of the waste generator shall read and then sign and date this certification. The date is the date of receipt by transporter.

NOTE: The waste generator shall retain a copy of this form.

#### Transporter Section (Items 10 & 11)

10. & 11. Enter name, address, and telephone number of each transporter used, if applicable. Print or type the full name and title of person accepting responsibility and acknowledging receipt of materials as listed on this waste shipment record for transport.

NOTE: The transporter shall retain a copy of this form.

Disposal Site Section (Items 12 & 13)

12. The authorized representative of the WDS shall note in this space any discrepancy between waste described on this manifest and waste actually received as well as any improperly enclosed or contained waste. Any rejected materials should be listed and destination of those materials provided. A site that converts asbestos-containing waste material to nonasbestos material is considered a WDS.
13. The signature (by hand) of the authorized WDS agent indicates acceptance and agreement with statements on this manifest except as noted in Item 12. The date is the date of signature and receipt of shipment.

NOTE: The WDS shall retain a completed copy of this form. The WDS shall also send a completed copy to the operator listed in Item 2.

**REMOVAL - CASE II (NON-FRIABLE ASBESTOS ABATEMENT) (BDE)**

Effective: September 1, 1990 Revised: August 1, 2001

**BUILDING REMOVAL:** This item shall consist of the removal and disposal of building(s), together with all foundations, retaining walls, and piers, down to a plane 300 mm (1 ft.) below the ultimate or existing grade in the area and also all incidental and collateral work necessary to complete the removal of the building(s) in a manner approved by the Engineer. Any holes, such as basements, shall be filled with a suitable granular material. The building(s) are identified as follows:

| <u>Building No.</u> | <u>Parcel No.</u> | <u>Location</u>                   | <u>Description</u>   |
|---------------------|-------------------|-----------------------------------|--|
| No. 1               | 409U003           | 2730 W. Rte. 136<br>Tennessee, IL | 1,382 sq. ft. one-story wood structure, with partial basement. Interior walls are hard plaster, ceilings are hard plaster and acoustical ceiling tiles. Floors are wood covered with vinyl sheeting and carpet. The building exterior is covered with vinyl and transite siding. Composition roof cover. |

**Discontinuance of Utilities:** The Contractor shall arrange for the discontinuance of all utility services that serve the building(s) according to the respective requirements and regulations of the City, County, or utility companies involved. The Contractor shall disconnect and seal, in an approved manner, all service outlets that serve any building(s) he/she is to remove.

Signs: Immediately upon execution of the contract and prior to the wrecking of any structures, the Contractor shall be required to paint or stencil, in contrasting colors of an oil base paint, on all four sides of each residence and two opposite sides of other structures, the following sign:

PROPERTY ACQUIRED FOR  
HIGHWAY CONSTRUCTION  
TO BE DEMOLISHED BY THE

VANDALS WILL BE PROSECUTED

The signs shall be positioned in a prominent location on the structure so that they can be easily seen and read and at a sufficient height to prevent defacing. The Contractor shall not paint signs nor start demolition of any building(s) prior to the time that the State becomes the owner of the respective building(s).

The Contractor has the option of removing the non-friable asbestos prior to demolition or demolishing the building(s) with the non-friable asbestos in place. Refer to the Special Provisions titled "Asbestos Abatement (General Conditions)" and "Removal and Disposal of Non-Friable Asbestos Building No. " contained herein.

Basis of Payment: This work will be paid for at the contract lump sum unit price for BUILDING REMOVAL, numbers as listed above, which price shall be payment in full for complete removal of the buildings and structures, including any necessary backfilling material as specified herein. The lump sum unit price(s) for this work shall represent the cost of demolition and disposal assuming all non-friable asbestos is removed prior to demolition. Any salvage value shall be reflected in the contract unit price for this item.

EXPLANATION OF BIDDING TERMS: Two separate contract unit price items have been established for the removal of each building. They are:

- 1 BUILDING REMOVAL NO. 1
- 2 REMOVAL AND DISPOSAL OF NON-FRIABLE ASBESTOS, BUILDING NO. 1

The Contractor shall have two options available for the removal and disposal of the non-friable asbestos.

The pay item for removal and disposal of non-friable asbestos will not be deleted regardless of the option chosen by the Contractor.

ASBESTOS ABATEMENT (GENERAL CONDITIONS): This work consists of the removal and disposal of non-friable asbestos from the building(s) to be demolished. All work shall be done according to the requirements of the U.S. Environmental Protection Agency (USEPA), the Illinois Environmental Protection Agency (IEPA), the Occupational Safety and Health Administration (OSHA), the Special Provision for "Removal and Disposal of Non-Friable Asbestos, Building No. 1," and as outlined herein.

Sketches indicating the location of Asbestos Containing Material (ACM) are included in the proposal on pages thru. Also refer to the Materials Description Table on page for a brief description and location of the various materials. Also included is a Materials Quantities Table on page. This table states the ACM is non-friable and gives the approximate quantity. The quantities are given only for information and it shall be the Contractor's responsibility to determine the exact quantities prior to submitting his/her bid.

The work involved in the removal and disposal of non-friable asbestos if done prior to demolition, shall be performed by a Contractor or Sub-Contractor prequalified with the Illinois Capital Development Board.

The Contractor shall provide a shipping manifest, similar to the one shown on page , to the Engineer for the disposal of all ACM wastes.

Permits: The Contractor shall apply for permit(s) in compliance with applicable regulations of the Illinois Environmental Protection Agency. Any and all other permits required by other federal, state, or local agencies for carrying on the work shall be the responsibility of the Contractor. Copies of the permit(s) shall be sent to the district office and the Engineer.

Notifications: The "Demolition/Renovation Notice" form, which can be obtained from the IEPA office, shall be completed and submitted to the address listed below at least 10 days prior to commencement of any asbestos removal or demolition activity. Separate notices shall be sent for the asbestos removal work and the building demolition if they are done as separate operations.

Asbestos Demolition/Renovation Coordinator  
Illinois Environmental Protection Agency  
Division of Air Pollution Control  
P. O. Box 19276  
Springfield, Illinois 62794-9276

(217) 785-1743

Notices shall be updated if there is a change in the starting date or the amount of asbestos changes by more than 20 percent.

Submittals:

A. All submittals and notices shall be made to the Engineer except where otherwise specified herein.

B. Submittals that shall be made prior to start of work:

1. Submittals required under Asbestos Abatement Experience.
2. Submit documentation indicating that all employees have had medical examinations and instruction on the hazards of asbestos exposure, on use and fitting of respirators, on protective dress, on use of showers, on entry and exit from work areas, and on all aspects of work procedures and protective measures as specified in Worker Protection Procedures.
3. Submit manufacturer's certification stating that vacuums, ventilation equipment, and other equipment required to contain airborne fibers conform to ANSI 29.2.
4. Submit to the Engineer the brand name, manufacturer, and specification of all sealants or surfactants to be used. Testing under existing conditions will be required at the direction of the Engineer.
5. Submit proof that all required permits, site locations, and arrangements for transport and disposal of asbestos-containing or asbestos-contaminated materials, supplies, and the like have been obtained (i.e., a letter of authorization to utilize designated landfill).
6. Submit a list of penalties, including liquidated damages, incurred through noncompliance with asbestos abatement project specifications.
7. Submit a detailed plan of the procedures proposed for use in complying with the requirements of this specification. Include in the plan the location and layout of decontamination units, the sequencing of work, the respiratory protection plan to be used during this work, a site safety plan, a disposal plan including the location of an approved disposal site, and a detailed description of the methods to be used to control pollution. The plan shall be submitted to the Engineer prior to the start of work.
8. Submit proof of written notification and compliance with the "Notifications" paragraph.

C. Submittals that shall be made upon completion of abatement work:

1. Submit copies of all waste chain-of-custodies, trip tickets, and disposal receipts for all asbestos waste materials removed from the work area;
2. Submit daily copies of work site entry logbooks with information on worker and visitor access;
3. Submit logs documenting filter changes on respirators, HEPA vacuums, negative pressure ventilation units, and other engineering controls; and
4. Submit results of any bulk material analysis and air sampling data collected during the course of the abatement including results of any on-site testing by any federal, state, or local agency.

Certificate of Insurance:

- A. The Contractor shall document general liability insurance for personal injury, occupational disease and sickness or death, and property damage.
- B. The Contractor shall document current Workmen's Compensation Insurance coverage.
- C. The Contractor shall supply insurance certificates as specified by the Department.

Asbestos Abatement Experience:



A. Company Experience. Prior to starting work, the Contractor shall supply evidence that he/she has been prequalified with the Illinois Capital Development Board and that he/she has been included on the Illinois Department of Public Health list of Approved Contractors.

B. Personnel Experience:

1. For Superintendent, the Contractor shall supply:

- a. Evidence of knowledge of applicable regulations in safety and environmental protection is required as well as training in asbestos abatement as evidenced by the successful completion of a training course in supervision of asbestos abatement as specified in 40 CFR 763, Subpart E, Appendix C, EPA Model Contractor Accreditation Plan. A copy of the certificate of successful completion shall be provided to the Engineer prior to the start of work.
  - b. Documentation of experience with abatement work in a supervisory position as evidenced through supervising at least two asbestos abatement projects; provide names, contact, phone number, and locations of two projects in which the individual(s) has worked in a supervisory capacity.
2. For workers involved in the removal of asbestos, the Contractor shall provide training as evidenced by the participation and successful completion of an accredited training course for asbestos abatement workers as specified in 40 CFR 763, Subpart E, Appendix C, EPA Model Contractor Accreditation Plan. A copy of the certificate of successful completion shall be provided to all employees who will be working on this project.

ABATEMENT AIR MONITORING: The Contractor shall comply with the following:

- A. Personal Monitoring. All personal monitoring shall be conducted per specifications listed in OSHA regulation, Title 29, Code of Federal Regulation 1926.58. All area sampling shall be conducted according to 40 CFR Part 763.90. All air monitoring equipment shall be calibrated and maintained in proper operating condition. Excursion limits shall be monitored daily. Personal monitoring is the responsibility of the contractor. Additional personal samples may be required by the Engineer at any time during the project.
- B. Interior Non-Friable Asbestos-Containing Materials. The contractor shall perform personal air monitoring during removal of all non-friable Transite and floor tile removal operations. The Engineer will also have the option to require additional personal samples and/or clearance samples during this type of work.
- C. Exterior Non-Friable Asbestos-Containing Materials. The contractor shall perform personal air monitoring during removal of all non-friable cementitious panels, piping, roofing felts, and built up roofing materials that contain asbestos.

The contractor shall conduct down wind area sampling to monitor airborne fiber levels at a frequency of no less than three per day.

#### D. Air Monitoring Professional

1. All air sampling shall be conducted by a qualified Air Sampling Professional supplied by the contractor. The Air Sampling Professional shall submit documentation of successful completion of the National Institute for Occupational Safety and Health (NIOSH) course #582 -"Sampling and Evaluating Airborne Asbestos Dust".

2. Air sampling shall be conducted according to NIOSH Method 7400. The results of these tests shall be provided to the Engineer within 24 hours of the collection of air samples.

REMOVAL AND DISPOSAL OF NON-FRIABLE ASBESTOS, BUILDING NO. 1: The Contractor has the option of removing and disposing of the non-friable asbestos prior to demolition of the building(s) or demolishing the building(s) with the non-friable asbestos in place.

Option #1 - If the Contractor chooses to remove all non-friable asbestos prior to demolition, the work shall be done according to the Special Provision titled "Asbestos Abatement (General Conditions)".

Option #2 - If the Contractor chooses to demolish the building(s) with the non-friable asbestos in place, the following provisions shall apply:

- 1 Continuously wet all non-friable ACM and other building debris with water during demolition.
- 2 Dispose of all demolition debris as asbestos containing material by placing it in lined, covered transport haulers and placing it in an approved landfill.

This work will be paid for at the contract unit price per lump sum for REMOVAL AND DISPOSAL OF NON-FRIABLE ASBESTOS, BUILDING NO. 1, as shown.

The cost for this work shall be determined as follows:

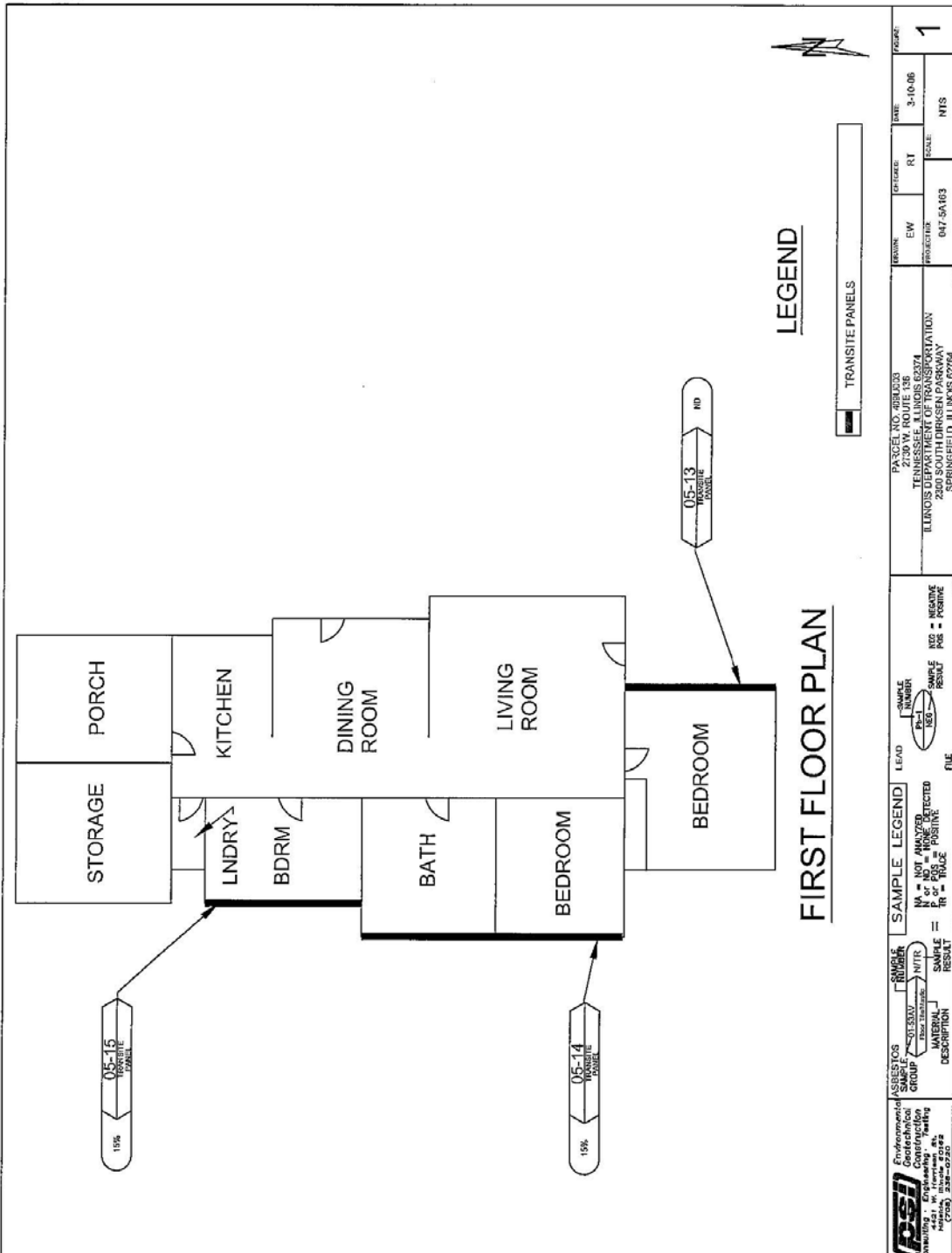
Option #1 -Actual cost of removal and disposal of non-friable asbestos.

Option #2 -The difference in cost between removing and disposing of the building if all non-friable asbestos is left in place and removing and disposing of the building assuming all non-friable asbestos is removed prior to demolition.

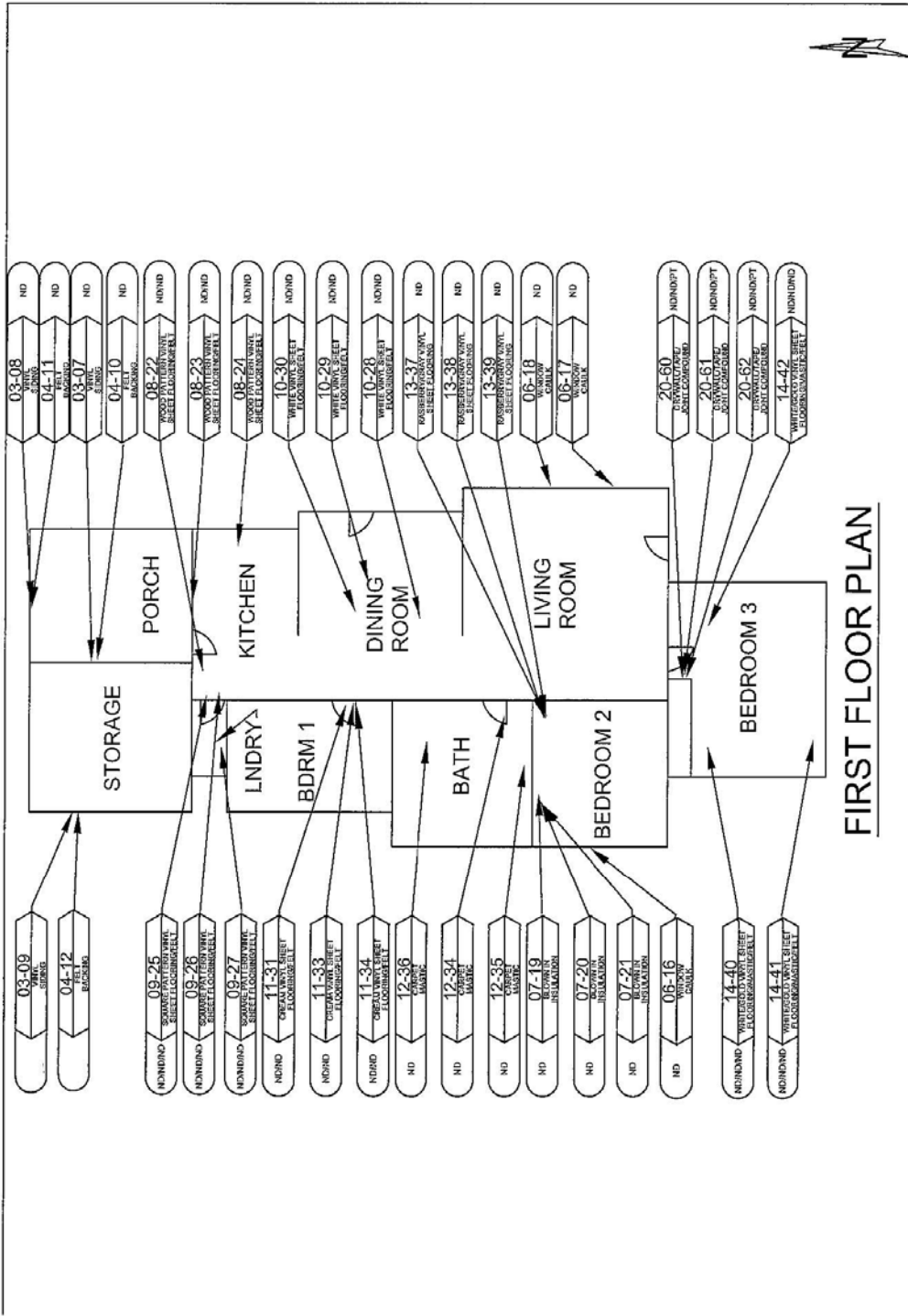
The cost of removing and disposing of the building(s), assuming all non-friable asbestos is removed first, shall be represented by the pay item "BUILDING REMOVAL NO. 1".

Regardless of the option chosen by the Contractor, this pay item will not be deleted, nor will the pay item BUILDING REMOVAL NO. 1, be deleted.

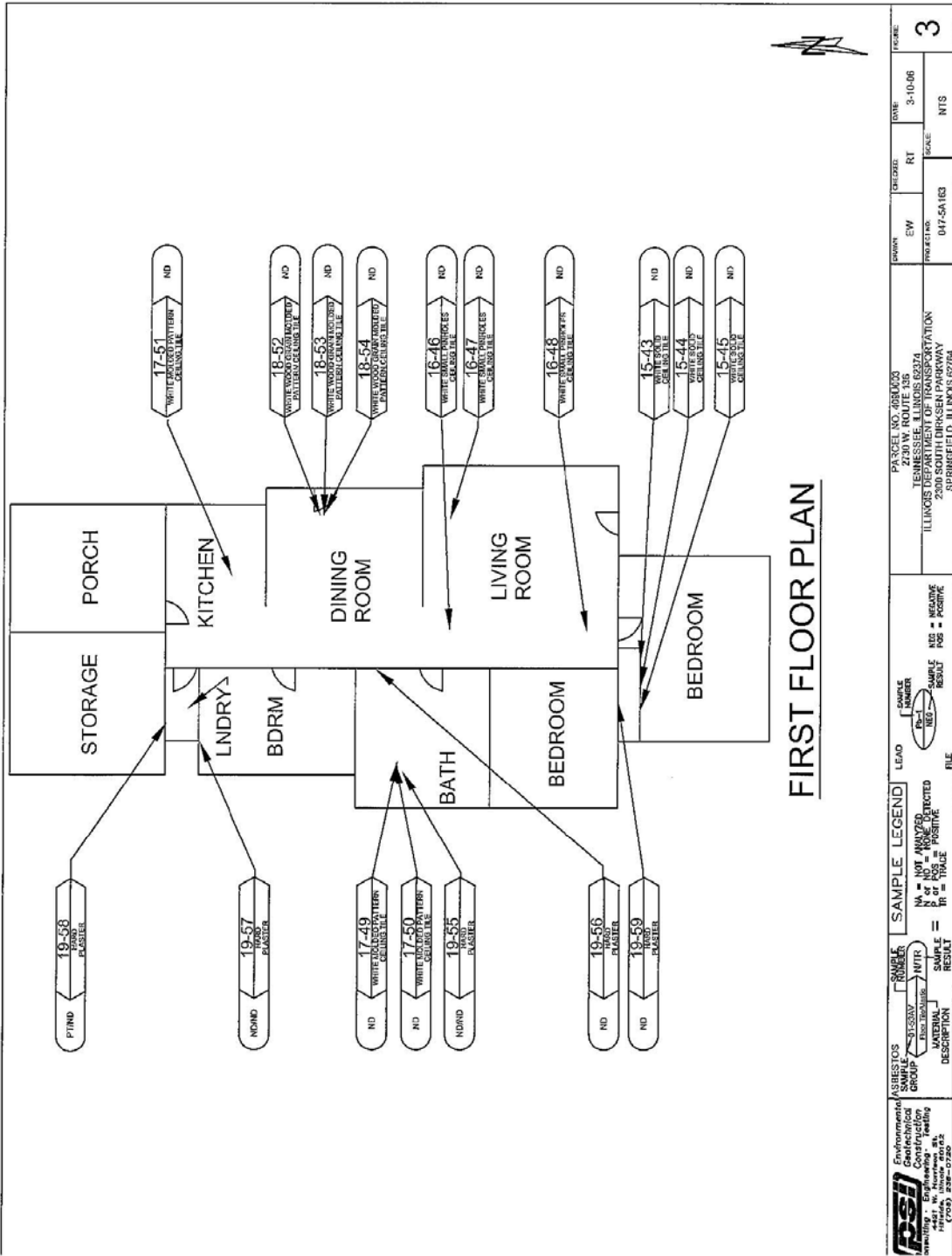
Appendix A  
Building Drawings – Asbestos Locations Building Removal No. 1

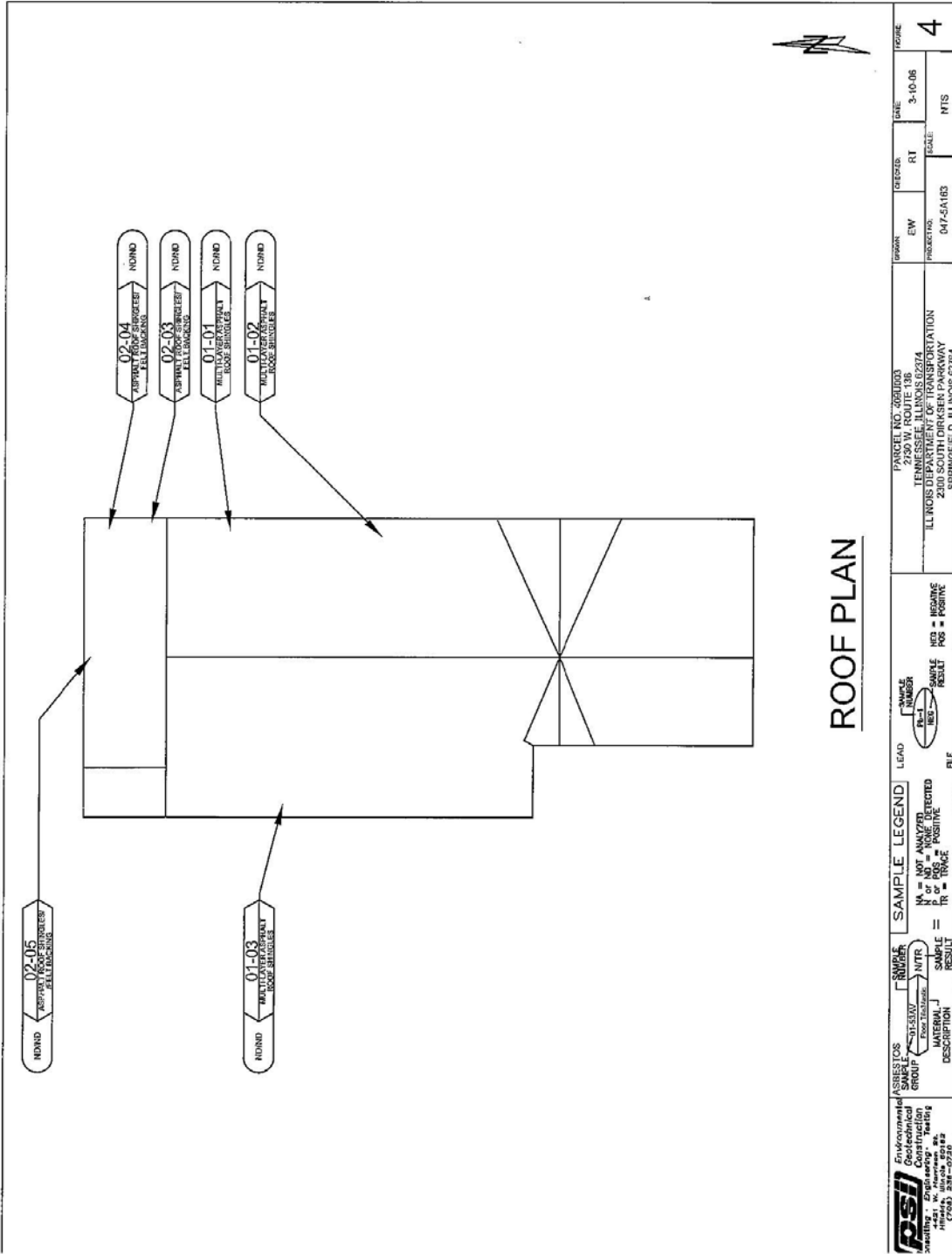


|   |   |                                   |                                  |                                       |  |                        |                             |
|---|---|-----------------------------------|----------------------------------|---------------------------------------|--|------------------------|-----------------------------|
| <b>psl</b><br>Environmental<br>Geotechnical<br>Consulting - Engineering - Testing<br>4421 W. Hennepin Ave.<br>Minneapolis, MN 55412<br>(763) 536-0220 | <b>ASBESTOS</b><br>GROUP<br>ANALYSIS<br>(3000)  | <b>LEAD</b><br>ANALYSIS<br>(3000) | <b>PCB</b><br>ANALYSIS<br>(3000) | <b>TRANSITE</b><br>ANALYSIS<br>(3000) | <b>ENVIRONMENTAL</b><br>ANALYSIS<br>(3000) | <b>DATE</b><br>3-10-06 | <b>FIGURE</b><br>1          |
|   | <b>CLIENT</b><br>ILLINOIS DEPARTMENT OF TRANSPORTATION<br>2300 SOUTH DIRKSEN PARKWAY<br>SPRINGFIELD, ILLINOIS 62764 | <b>PROJECT</b><br>047.5A103       | <b>SCALE</b><br>NTS              | <b>REVISION</b><br>EW<br>RT           | <b>DATE</b><br>3-10-06                     | <b>FIGURE</b><br>1     | <b>PROJECT</b><br>047.5A103 |



|   |  |                   |   |                    |                  |
|---|--|-------------------|---|--------------------|------------------|
| <p>Environmental<br/>         Geotechnical<br/>         Construction<br/>         Consulting<br/>         11414 N. Interstate 55<br/>         Springfield, IL 62764<br/>         (765) 258-0720</p> | <p>ASBESTOS<br/>         SAMPLE GROUP</p>                                  | <p>LEAD</p>       | <p>PCB NUMBER</p>   | <p>DATE</p>        | <p>3-10-05</p>   |
|   | <p>DESCRIPTION</p>   | <p>FILE</p>       | <p>PARCEL NO. 4981003<br/>         2730 W. ROUTE 156<br/>         TEMPESEE, ILLINOIS 62774<br/>         ILLINOIS<br/>         2300 SOUTH DORRSEN PARKWAY<br/>         SPRINGFIELD, ILLINOIS 62764</p> | <p>PROJECT NO.</p> | <p>047-56163</p> |
| <p>ANALYSIS</p>   | <p>NA = NOT ANALYZED<br/>         P = POSITIVE<br/>         IR = TRACE</p> | <p>PCB NUMBER</p> | <p>SCALE</p>  | <p>RT</p>          | <p>NTS</p>       |
| <p>SAMPLE RESULT</p>  | <p>SAMPLE RESULT</p>   | <p>FILE</p>       | <p>2</p>  | <p>PROJECT NO.</p> | <p>047-56163</p> |





ROOF PLAN

|   |   |                               |  |                       |   |                       |   |                       |                       |                       |                       |
|---|---|-------------------------------|--|-----------------------|---|-----------------------|---|-----------------------|-----------------------|-----------------------|-----------------------|
| <b>PSI</b><br>Environmental<br>Geotechnical<br>Construction<br>1000 W. Riverfront, St.<br>Louis, MO 63101<br>(314) 538-0720 | ADDRESS<br>SAMPLE GROUP<br>2130 W. ROUTE 138<br>SPRINGFIELD, ILLINOIS 62274                             | SAMPLE NUMBER<br>NTR<br>02-05 | SAMPLE RESULT<br>ASPHALT ROOF SHINGLES - FULL COVERAGE | LEAD<br>NOT ANALYZED  | SAMPLE LEGEND<br>N = NOT ANALYZED<br>P = POSITIVE<br>IR = TRACE | NAME NUMBER<br>02-05  | PROJECTS<br>ILLINOIS STATE POLICE STATION<br>2400 SOUTH LORRAINE PARKWAY<br>SPRINGFIELD, ILLINOIS 62204 | DRAWN<br>EW           | CHECKED<br>RT         | DATE<br>3-10-05       | FIGURE<br>4           |
|   | PROJECTS<br>ILLINOIS STATE POLICE STATION<br>2400 SOUTH LORRAINE PARKWAY<br>SPRINGFIELD, ILLINOIS 62204 | SCALE<br>NTS                  | PROJECTS<br>047-54183                                  | PROJECTS<br>047-54183 | PROJECTS<br>047-54183   | PROJECTS<br>047-54183 | PROJECTS<br>047-54183   | PROJECTS<br>047-54183 | PROJECTS<br>047-54183 | PROJECTS<br>047-54183 | PROJECTS<br>047-54183 |

Appendix B - C

Material Description Table

| Material Description                      | Percent ACM | Location          | Quantity, condition,<br>Material number |
|---|-------------|-------------------|---|
| Transite siding/black<br>felt/beige paper | 15%         | Building exterior | 1400 sq. ft.; NF<br>Good<br>MTL # 05    |



APPENDIX D  
 SHIPPING MANIFEST  
 Generator

|  |                                       |                         |
|--|---------------------------------------|-------------------------|
| 1. Work Site Name and Mailing Address  | Owner's Name                          | Owner's Telephone No.   |
| 2. Operator's Name and Address   |                                       | Operator's Telephone No |
| 3. Waste Disposal Site (WDS) Name<br>Physical Site Location  | Mailing Address, and<br>Site Location | WDS Telephone No.       |
| 4. Name and Address of Responsible Agency  |                                       |                         |
| 5. Description of Materials  |                                       |                         |
| 6. Containers  | No.                                   | Type                    |
| 7. Total Quantity  | M3                                    | (Yd3)                   |
| 8. Special Handling Instructions and Additional Information  |                                       |                         |
| 9. OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and government regulations. |                                       |                         |
| Printed/Typed Name & Title   | Signature                             | Month Day Year          |

Transporter

|   |         |           |                |
|---|---------|-----------|----------------|
| 10. Transporter 1 (Acknowledgement of Receipt of Materials) |         |           |                |
| Printed/Typed Name & Title<br>and Telephone No.             | Address | Signature | Month Day Year |
| 11. Transporter 2 (Acknowledgement of Receipt of Materials) |         |           |                |
| Printed/Typed Name & Title<br>and Telephone No.             | Address | Signature | Month Day Year |

Disposal Site

|   |           |                |
|---|-----------|----------------|
| 12. Discrepancy Indication Space  |           |                |
| 13. Waste Disposal Site Owner or Operator: Certification of Receipt of Asbestos Materials Covered By This Manifest Except as Noted in Item 12 |           |                |
| Printed/Typed Name & Title  | Signature | Month Day Year |

### Appendix D Instructions

#### Waste Generator Section (Items 1-9)

10. Enter the name of the facility at which asbestos waste is generated and the address where the facility is located. In the appropriate spaces, also enter the name of the owner of the facility and the owner's phone number.
11. If a demolition or renovation, enter the name and address of the Company and authorized agent responsible for performing the asbestos removal. In the appropriate spaces, also enter the phone number of the operator.
12. Enter the name, address, and physical site location of the waste disposal site (WDS) that will be receiving the asbestos materials. In the appropriate spaces, also enter the phone number of the WDS. Enter "on-site" if the waste will be disposed of on the generator's property.
13. Provide the name and address of the local, State, or EPA Regional Office responsible for administering the asbestos NESHAP program.
14. Indicate the types of asbestos waste materials generated. If from a demolition or renovation, indicate the amount of asbestos that is
  - Friable asbestos material
  - Nonfriable asbestos material
15. Enter the number of containers used to transport the asbestos materials listed in Item 5. Also enter one of the following container codes used in transporting each type of asbestos material (specify any other type of container used if not listed below):
  - DM -Metal drums, barrels
  - DP -Plastic drums, barrels
  - BA -6 mil plastic bags or wrapping
16. Enter the quantities of each type of asbestos material removed in units of cubic meters (cubic yards).
17. Use this space to indicate special transportation, treatment, storage or disposal or Bill of Lading information. If an alternate waste disposal site is designated, note it here. Emergency response telephone numbers or similar information may be included here.
18. The authorized agent of the waste generator shall read and then sign and date this certification. The date is the date of receipt by transporter.

NOTE: The waste generator shall retain a copy of this form.

#### Transporter Section (Items 10 & 11)

10. & 11. Enter name, address, and telephone number of each transporter used, if applicable. Print or type the full name and title of person accepting responsibility and acknowledging receipt of materials as listed on this waste shipment record for transport.

NOTE: The transporter shall retain a copy of this form.

Disposal Site Section (Items 12 & 13)

14. The authorized representative of the WDS shall note in this space any discrepancy between waste described on this manifest and waste actually received as well as any improperly enclosed or contained waste. Any rejected materials should be listed and destination of those materials provided. A site that converts asbestos-containing waste material to nonasbestos material is considered a WDS.
15. The signature (by hand) of the authorized WDS agent indicates acceptance and agreement with statements on this manifest except as noted in Item 12. The date is the date of signature and receipt of shipment.

NOTE: The WDS shall retain a completed copy of this form. The WDS shall also send a completed copy to the operator listed in Item 2.

**BUILDING REMOVAL - CASE IV (NO ASBESTOS) (BDE)**

Effective; September 1, 1990 Revised August 1, 2001

**BUILDING REMOVAL:** This item shall consist of the removal and disposal of building(s), together with all foundations, retaining walls, and piers, down to a plane 300 mm (1 ft.) below the ultimate or existing grade in the area and also all incidental and collateral work necessary to complete the removal of the building(s) in a manner approved by the Engineer. Any holes, such as basements, shall be filled with a suitable granular material. The building(s) are identified as follows:

| <u>Building No.</u> | <u>Parcel No.</u> | <u>Location</u> | <u>Description</u>   |
|---------------------|-------------------|-----------------|--|
| Bldg. No. 2         | 409U003           | Lt. Sta. 141+80 | Approx. 1884 sq ft 2 story Wood barn with a lean-to, Electricity and water.                            |
| Bldg. No. 3         | 409U005           | Rt. Sta. 147+70 | Approx. 1500 sq ft wood barn with tin roof, and small collapsed shed.                                  |
| Bldg. No. 5         | 409U005           | Lt. Sta. 148+35 | Approx. 3,520 sq ft metal clad pole building , with electricity.                                       |
| Bldg. No. 6         | 409U005           | Lt. Sta. 148+40 | Approx. 480 sq ft corrugated steel shed with electricity.  |
| Bldg. No. 7         | 409U005           | Lt. Sta. 149+00 | A 32' by 36' wood barn With wood and concrete Floor.   |
| Bldg. No. 8         | 409U005           | Lt. Sta. 149+60 | A 7200 bushel metal grain bin and dryer and a steel and wire mesh corn crib both have concrete floors. |

Discontinuance of Utilities: The Contractor shall arrange for the discontinuance of all utility services that serve the building(s) according to the respective requirements and regulations of the City, County, or utility companies involved. The Contractor shall disconnect and seal, in an approved manner, all service outlets that serve any building(s) he/she is to remove.

Signs: Immediately upon execution of the contract and prior to the wrecking of any structures, the Contractor shall be required to paint or stencil, in contrasting colors of an oil base paint, on all four sides of each residence and two opposite sides of other structures, the following sign:

PROPERTY ACQUIRED FOR  
HIGHWAY CONSTRUCTION  
TO BE DEMOLISHED BY THE  
VANDALS WILL BE PROSECUTED

The signs shall be positioned in a prominent location on the structure so that they can be easily seen and read and at a sufficient height to prevent defacing. The Contractor shall not paint signs nor start demolition of any building(s) prior to the time that the State becomes the owner of the respective building(s).

Basis of Payment: This work will be paid for at the contract lump sum unit price for BUILDING REMOVAL, numbers as listed above, which price shall be payment in full for complete removal of the buildings and structures, including any necessary backfilling material as specified herein. The lump sum unit price(s) for this work shall represent the cost of demolition. Any salvage value shall be reflected in the contract unit price for this item.

Notifications: The "Demolition/Renovation Notice" form, which can be obtained from the IEPA office, shall be completed and submitted to the address listed below at least 10 days prior to commencement of any demolition activity.

Asbestos Demolition/Renovation Coordinator  
Illinois Environmental Protection Agency  
Division of Air Pollution Control

P. O. Box 19276  
Springfield, Illinois 62794-9276  
(217)785-1743

Notices shall be updated if there is a change in the starting date or the amount of asbestos changes by more than 20 percent.

Submittals:

- A. All submittals and notices shall be made to the Engineer except where otherwise specified herein.
- B. Prior to starting work, the Contractor shall submit proof of written notification and compliance with the "Notifications" paragraph.

**RAILROAD PROTECTIVE LIABILITY INSURANCE (5 AND 10) (BDE)**

Effective: January 1, 2006

Description. Railroad Protective Liability and Property Damage Liability Insurance shall be carried according to Article 107.11 of the Standard Specifications, except the limits shall be a minimum of \$5,000,000 combined single limit per occurrence for bodily injury liability and property damage liability with an aggregate limit of \$10,000,000 over the life of the policy. A separate policy is required for each railroad unless otherwise noted.

| NAMED INSURED & ADDRESS   | NUMBER & SPEED OF PASSENGER TRAINS | NUMBER & SPEED OF FREIGHT TRAINS |
|---|------------------------------------|----------------------------------|
| Burlington Northern & Santa Fe Railway Company.<br>P.O. Box 961073<br>2500 Lou Menk Dr., AOB-1<br>Fort Worth, TX 76161-0073 | 2 at 79 m.p.h.                     | 18 at 60 m.p.h.                  |
| DOT/AAR No.:  | RR Mile Post: 206.1 to 212.5       |                                  |
| RR Division: Illinois   | RR Sub-Division: Brookfield        |                                  |
| For Freight/Passenger Information Contact: Dave McCurdy   | Phone: (217) 323-4807              |                                  |
| For Insurance Information Contact: Carol Trinkle  | Phone: (913) 551-4280              |                                  |

Approval of Insurance. The original and one certified copy of each required policy shall be submitted to the following address for approval:

Illinois Department of Transportation  
Bureau of Design and Environment  
2300 South Dirksen Parkway, Room 326  
Springfield, Illinois 62764

The Contractor will be advised when the Department has received approval of the insurance from the railroad(s). Before any work begins on railroad right-of-way, the Contractor shall submit to the Engineer evidence that the required insurance has been approved by the railroad(s). The Contractor shall also provide the Engineer with the expiration date of each required policy.

Basis of Payment. Providing Railroad Protective Liability and Property Damage Liability Insurance will be paid for at the contract unit price per Lump Sum for RAILROAD PROTECTIVE LIABILITY INSURANCE.

**REMOVE AND REINSTALL END SECTION**

This work consists of the removal, storage and reinstallation of the concrete flared end section on Ramp J Sta. 181+80. The end section shall be removed and reinstalled at the end of the proposed pipe culvert extension. This work shall be done in accordance with applicable portions of Section 542 of the Standard Specifications.

This work will be measured and paid for at the contract unit price each for REMOVE AND REINSTALL END SECTION.

**AGGREGATE SHIPPING TICKETS (BDE)**

Effective: January 1, 2006

Add the following to Article 1003.01 of the Standard Specifications:

“(f) Shipping Tickets. Shipping tickets for the material shall be according to the current Bureau of Materials and Physical Research Policy Memorandum, “Designation of Aggregate Information on Shipping Tickets”.”

Add the following to Article 1004.01 of the Standard Specifications:

“(f) Shipping Tickets. Shipping tickets for the material shall be according to the current Bureau of Materials and Physical Research Policy Memorandum, “Designation of Aggregate Information on Shipping Tickets”.”

Add the following to Article 1005.01 of the Supplemental Specifications:

“(d) Shipping Tickets. Shipping tickets for the material shall be according to the current Bureau of Materials and Physical Research Policy Memorandum, “Designation of Aggregate Information on Shipping Tickets”.”

80156

**AUTHORITY OF RAILROAD ENGINEER (BDE)**

Effective: July 1, 2004

Revise Article 105.02 of the Standard Specifications to read:

“**105.02 Authority of Railroad Engineer.** Whenever the safety of railroad traffic is concerned, the Railroad Engineer will have jurisdiction over safety measures to be taken and his/her decision as to the methods, procedures, and measures used shall be final, and any and all Contractors performing work near or about the railroad shall be governed by such decision. Instructions to the Contractor by the Railroad Engineer will be given through the Engineer. Work ordered as specified herein will be classified and paid for according to Article 104.02. Work performed for the Contractor’s convenience will not be paid for separately but shall be considered as included in the contract.”

80128

**BITUMINOUS BASE COURSE / WIDENING SUPERPAVE (BDE)**

Effective: April 1, 2002

Revised: August 1, 2005

Description. This work shall consist of constructing bituminous base course Superpave and bituminous concrete base course widening Superpave according to Sections 355 and 356 respectively, of the Standard Specifications and the special provision, "Quality Control/Quality Assurance of Bituminous Concrete Mixtures" except as modified herein.

Revise Article 355.02(d) of the Standard Specifications to read:

"(d) RAP Material (Note 3)"

Revise Note 2 of Article 355.02 of the Standard Specifications to read:

"Note 2. Unless otherwise specified on the plans, the bituminous material shall be performance graded (PG) asphalt cement (AC) , PG58-22. When more than 15 percent RAP is used, a softer PG binder may be required as determined by the Engineer. When the pavement has a structural number ( $D_t$ ) of 3.00 or less, the low temperature grade of the asphalt cement shall be lowered one grade (i.e. PG58-28 replaces PG58-22)."

Add the following to the end Article 355.02 of the Standard Specifications:

"Note 3. RAP shall meet the requirements of the special provision "RAP for Use in Bituminous Concrete Mixtures"."

Revise Article 355.05 of the Standard Specifications to read:

**"355.05 Mixture Design.** The Contractor shall submit mix designs for approval, for each required mixture. Mix designs shall be developed by Level III personnel who have completed the course, "Superpave Mix Design Upgrade". The mixtures shall be designed according to the respective Illinois Modified AASHTO references listed below:

- |              |   |
|--------------|---|
| AASHTO MP 2  | Standard Specification for Superpave Volumetric Mix Design  |
| AASHTO R 30  | Standard Practice for Mixture Conditioning of Hot-Mix Asphalt (HMA)   |
| AASHTO PP 28 | Standard Practice for Designing Superpave HMA   |
| AASHTO T 209 | Theoretical Maximum Specific Gravity and Density of Bituminous Paving Mixtures  |
| AASHTO T 312 | Preparing and Determining the Density of Hot Mix Asphalt (HMA) Specimens by Means of the Superpave Gyration Compactor |
| AASHTO T 308 | Determining the Asphalt Content of Hot Mix Asphalt (HMA) by the Ignition Method                                       |

(a) Job Mix Formula (JMF). The JMF shall be according to the following limits:

| <u>Ingredient</u>   | <u>Percent by Dry Weight</u> |
|---------------------|------------------------------|
| Aggregate.....      | 93.0 to 96.0                 |
| Asphalt Cement..... | 4.0 to 7.0                   |
| Dust/AC Ratio ..... | 1.4                          |

When RAP material is being used, the JMF shall be according to the following limits:

| <u>Ingredient</u>                  | <u>Percent by Dry Weight</u> |
|------------------------------------|------------------------------|
| Virgin Aggregate(s) .....          | 46.0 to 96.0                 |
| RAP Material(s) (Note 1).....      | 0 to 50                      |
| Mineral Filler (if required) ..... | 0 to 5.0                     |
| Asphalt Cement.....                | 4.0 to 7.0                   |
| Dust/AC Ratio .....                | 1.4                          |

Note 1. If specified on the plans, the maximum percentage of RAP shall be as specified therein.

It is recommended that the selected combined aggregate gradation not pass through the restricted zones specified in Illinois Modified AASHTO MP 2.

Bituminous concrete binder course Superpave mixture IL-25.0 or IL-19.0 meeting the requirements of the special provision, "Superpave Bituminous Concrete Mixtures" may also be used. The minimum compacted lift thickness specified therein shall apply.

(b) Volumetric Requirements.

| <b>Design Compactive Effort</b> | <b>Design Air Voids Target (%)</b> |
|---------------------------------|------------------------------------|
| N <sub>DES</sub> =50            | 2.0                                |

(c) Determination of Need for Anti-Stripping Additive. The mixture designer shall determine if an additive is needed in the mix to prevent stripping. The determination will be made on the basis of tests performed according to Illinois Modified AASHTO T 283 using 4 in. Marshall bricks. To be considered acceptable by the Engineer as a mixture not susceptible to stripping, the ratio of conditioned to unconditioned split tensile strengths (TSR) shall be equal to or greater than 0.75. Mixtures, either with or without an additive, with TSR values less than 0.75 will be considered unacceptable.

If it is determined that an additive is required, the additive may be hydrated lime, slaked quicklime, or a liquid additive, at the Contractor's option. The liquid additive shall be selected from the Department's list of approved additives and may be limited to those which have exhibited satisfactory performance in similar mixes.



Dry hydrated lime shall be added at a rate of 1.0 to 1.5 percent by weight of total dry aggregate. Slurry shall be added in such quantity as to provide the required amount of hydrated lime solids by weight of total dry aggregate. The exact rate of application for all anti-stripping additives will be determined by the Engineer. The method of application shall be according to Article 406.12 of the Standard Specifications."

Revise Article 355.06 of the Standard Specifications to read:

**"355.06 Mixture Production.** The asphalt cement shall be transferred to the asphalt tanks and heated to a temperature of 120 °C (250 °F) to 175 °C (350 °F). If the loading temperature exceeds 175 °C (350 °F), the asphalt shall not be used until it has cooled to 175 °C (350 °F). Wide variations in temperature which affect the amount of asphalt delivered will not be permitted.

When a hot-mix plant conforming to Article 1102.01 is used, the aggregate shall be dried and heated in the revolving dryer to a temperature of 120 °C (250 °F) to 175 °C (350 °F).

The aggregate and bituminous material used in the bituminous aggregate mixture shall be measured separately and accurately by weight or by volume. When the aggregate is in the mixer, the bituminous material shall be added and mixing continued for a minimum of 30 seconds and until a homogeneous mixture is produced in which all particles of the aggregate are coated. The mixing period, size of the batch and the production rate shall be approved by the Engineer.

The ingredients shall be heated and combined in such a manner as to produce a mixture which, when discharged from the mixer, shall be workable and vary not more 10 °C (20 °F) from the temperature set by the Engineer.

When RAP material(s) is used in the bituminous aggregate mixture, the virgin aggregate(s) shall be dried and heated in the dryer to a temperature that will produce the specified resultant mix temperature when combined with the RAP material.

The heated virgin aggregates and mineral filler shall be combined with RAP material in such a manner as to produce a bituminous mixture which when discharged from the mixer shall not vary more than 15 °C (30 °F) from the temperature set by the Engineer. The combined ingredients shall be mixed for a minimum of 35 seconds and until a homogeneous mixture as to composition and temperature is obtained. The total mixing time shall be a minimum of 45 seconds consisting of dry and wet mixing. Variation in wet and dry mixing times may be permitted, depending on the moisture content and amount of salvaged material used. The mix temperature shall not exceed 175 °C (350 °F). Wide variations in the mixture temperature will be cause for rejection of the mix.

- (a) Personnel. The QC Manager and Level I Technician shall have successfully completed the Department's "Superpave Field Control Course".

- (b) Required Tests. Testing shall be conducted to control the production of the bituminous mixture using the test methods identified and performed at a frequency not less than indicated in the following table.

| Parameter  | Frequency of Tests<br>Non-Class I Mixtures  | Test Method   |
|--|---|---|
| Aggregate Gradation<br><br>Hot bins for batch and continuous plants.<br><br>Individual cold-feeds or combined belt-feed for drier-drum plants.<br><br>(% passing sieves:<br>12.5 mm (1/2 In.),<br>4.75 mm (No. 4),<br>75 µm (No. 200)) | 1 gradation per day of production.<br><br>The first day of production shall be washed ignition oven test on the mix. Thereafter, the testing shall alternate between dry gradation and washed ignition oven test on the mix.<br><br>The dry gradation and the washed ignition oven test results shall be plotted on the same control chart. | Illinois Procedure (See Manual of Test Procedures for Materials). |
| Asphalt Content by ignition oven (Note 1.)   | 1 per day   | Illinois-Modified AASHTO T 308                                    |
| Air Voids  |   |   |
| Bulk Specific Gravity of Gyratory Sample   | 1 per day   | Illinois-Modified AASHTO T 312                                    |
| Maximum Specific Gravity of Mixture  | 1 per day   | Illinois-Modified AASHTO T 209                                    |

Note 1. The Engineer may waive the ignition oven requirement for AC content if the aggregates to be used are known to have ignition AC content calibration factors which exceed 1.5 percent. If the ignition oven requirement is waived, other Department approved methods shall be used to determine AC content.

During production, the ratio of minus 75 µm (#200) sieve material to total asphalt cement shall be not less than 0.6 nor more than 1.6, and the moisture content of the mixture at discharge from the mixer shall not exceed 0.5 percent. If at any time the ratio of minus 75 µm (#200) material to asphalt or moisture content of the mixture falls outside the stated limits, production of the mix shall cease. The cause shall be determined and corrective action satisfactory to the Engineer shall be initiated prior to resumption of production.

During production, mixture containing an anti-stripping additive will be tested by the Engineer for stripping according to Illinois Modified AASHTO T 283. If the mixture fails to meet the TSR criteria for acceptance, no further mixture will be accepted until the Contractor takes such action as is necessary to furnish a mixture meeting the criteria.

- (c) Control Charts/Limits. Control charts/limits shall be according to QC/QA requirements for Non-Class I Mixtures, except air voids and density shall be plotted on the control charts within the following control limits:

| Individual Test Control Limits |                                 |
|--------------------------------|---------------------------------|
| Voids                          | ±1.2%                           |
| Density <sup>1/</sup>          | 93.0 – 97.4% of G <sub>mm</sub> |

- 1/ Except when placed as first lift over unimproved subgrade. When the exception applies, the first lift over unimproved subgrade shall be compacted to an average density of not less than 95 percent nor greater than 102 percent of the target density obtained on the growth curve.

Revise Article 355.08 of the Standard Specifications to read:

**“355.08 Placing.** The bituminous mixture shall be placed with a spreading and finishing machine. The minimum compacted thickness of each lift shall be according to the following table:

| Nominal Maximum Aggregate Size of Mixture | Minimum Compacted Lift Thickness |
|---|----------------------------------|
| CA 10 - 19 mm (3/4 in.)                   | 57 mm (2 1/4 in.)                |
| CA 6 – 25 mm (1 in.)                      | 76 mm (3 in.)                    |

The maximum compacted thickness of each lift shall be 100 mm (4 in.). If the Contractor elects to substitute an approved vibratory roller for one of the required rollers, the maximum compacted thickness of the each lift, excluding the top lift, may be increased to 150 mm (6 in.) provided the required density is obtained.

The surface of each lift shall be clean and dry before succeeding lifts are placed.”

Revise Article 355.13 of the Standard Specifications to read:

**“355.13 Basis of Payment.** This work will be paid for at the contract unit price per square meter (square yard) for BITUMINOUS BASE COURSE SUPERPAVE of the thickness specified.”

Revise Article 356.02 of the Standard Specifications to read:

**“356.02 Materials.** The materials for the bituminous concrete mixture shall meet the requirements of Article 355.02, be designed according to Article 355.05 and produced according to Article 355.06. Bituminous concrete binder course Superpave mixture IL-25.0 or IL-19.0 meeting the requirements of the special provision, “Superpave Bituminous Concrete Mixtures” may also be used. The minimum compacted lift thickness specified therein shall apply.”

Revise the first paragraph of Article 356.06 of the Standard Specifications to read:

**“356.06 Base Course Widening.** The bituminous concrete mixture shall be transported according to Article 406.14.”

Revise the second sentence of the fifth paragraph of Article 356.06 of the Standard Specifications to read:

"The minimum compacted thickness of each lift shall be according to the table shown in Article 355.08."

Revise the first paragraph of Article 356.11 of the Standard Specifications to read:

**"356.11 Basis of Payment.** Where the Department requires that bituminous concrete be used, this work will be paid for at the contract unit price per square meter (square yard) for BITUMINOUS CONCRETE BASE COURSE WIDENING SUPERPAVE of the thickness specified."

80065

**BITUMINOUS CONCRETE SURFACE COURSE (BDE)**

Effective: April 1, 2001

Revised: April 1, 2003

Replace the fourth paragraph of Article 406.23(b) of the Standard Specifications with the following:

"Mixture for cracks, joints, flangeways, leveling binder (machine method), leveling binder (hand method) and binder course in excess of 103 percent of the quantity specified by the Engineer will not be measured for payment.

Surface course mixture in excess of 103 percent of adjusted plan quantity will not be measured for payment. The adjusted plan quantity for surface course mixtures will be calculated as follows:

Adjusted Plan Quantity = C x quantity shown on the plans or as specified by the Engineer.

where C =      metric:  $C = \frac{G_{mb} \times 24.99}{U}$                       English:  $C = \frac{G_{mb} \times 46.8}{U}$

and where:

$G_{mb}$  = average bulk specific gravity from approved mix design.

$U$  = Unit weight of surface course shown on the plans in kg/sq m/25 mm (lb/sq yd/in.), used to estimate plan quantity.

24.99 = metric constant.

46.8 = English constant.

If project circumstances warrant a new surface course mix design, the above equations shall be used to calculate the adjusted plan quantity for each mix design using its respective average bulk specific gravity."

80050

**BITUMINOUS EQUIPMENT, SPREADING AND FINISHING MACHINE (BDE)**

Effective: January 1, 2005

Revise the fourth paragraph of Article 1102.03 of the Standard Specifications to read:

“The paver shall be equipped with a receiving hopper having sufficient capacity for a uniform spreading operation. The hopper shall be equipped with a distribution system to uniformly place a non-segregated mixture in front of the screed. The distribution system shall have chain curtains, deflector plates, and/or other devices designed and built by the paver manufacturer to prevent segregation during distribution of the mixture from the hopper to the paver screed. The Contractor shall submit a written certification that the devices recommended by the paver manufacturer to prevent segregation have been installed and are operational. Prior to paving, the Contractor, in the presence of the Engineer, shall visually inspect paver parts specifically identified by the manufacturer for excessive wear and the need for replacement. The Contractor shall supply a completed check list to the Engineer noting the condition of the parts. Worn parts shall be replaced. The Engineer may require an additional inspection prior to the placement of a surface course or at other times throughout the work.”

80142

**BRIDGE DECK CONSTRUCTION (BDE)**

Effective: April 1, 2002

Revised: April 1, 2004

Add the following to Article 503.03 of the Standard Specifications:

“(h). Fogging Equipment ..... 1103.17(k)”

Add the following after the first sentence of the second paragraph to Article 503.07 of the Standard Specifications:

“When placing Class BD concrete, the discharge end of the pump shall have attached an “S” shaped flexible or rigid conduit, a 90 degree elbow with a minimum of 3 m (10 ft) of flexible conduit placed parallel to the deck, or a similar configuration approved by the Engineer.”

Add the following after the second sentence of the ninth paragraph of Article 503.07 of the Standard Specifications:

“When consolidating concrete in bridge decks, the vibrator shall be vertically inserted into the concrete for 3 - 5 seconds, or for a period of time determined by the Engineer.”

Add the following after the first paragraph of Article 503.17 of the Standard Specifications:

“For the bridge deck pour, fogging equipment shall be in operation unless the evaporation rate is less than 0.5 kg/sq m/hour (0.1 lb/sq ft/hour) and the Engineer gives permission to turn off the equipment. The evaporation rate shall be determined according to the figure in the Portland Cement Association’s publication, “Design and Control of Concrete Mixtures” (refer to the section on plastic shrinkage cracking). The Contractor shall provide temperature, relative humidity, and wind speed measuring equipment.

The fogging equipment shall be adjusted to adequately cover the entire width of the pour.

If there is a delay of more than ten minutes during bridge deck placement, wet burlap shall be used to protect the concrete until operations resume.

Concrete placement operations shall be coordinated to limit the distance between the point of concrete placement and concrete covered with cotton mats for curing. The distance shall not exceed 10.5 m (35 ft). For bridge deck widths greater than 15 m (50 ft), the distance shall not exceed 7.5 m (25 ft)."

Add the following to the end of the first paragraph of Article 503.17(b) of the Standard Specifications to read:

"The concrete in these areas shall be struck off during the deck pour and excess material from the finishing machine shall not be incorporated."

In the Coarse Aggregate Gradation table of Article 1004.01(c) of the Standard Specifications revise the percent passing the 12.5 mm (1/2 in.) sieve for gradation CA 7 to "45±15<sup>4/ 9/</sup>".

In the Coarse Aggregate Gradation table of Article 1004.01(c) of the Standard Specifications revise the percent passing the 12.5 mm (1/2 in.) sieve for gradation CA 11 to "45±15<sup>6/ 9/</sup>".

Add the following to the Coarse Aggregate Gradation table of the Standard Specifications:

"9/ When Class BD concrete is to be pumped, the coarse aggregate gradation shall have a minimum of 45 percent passing the 12.5 mm (1/2 in.) sieve. The Contractor may combine two or more coarse aggregate sizes, consisting of CA-7, CA-11, CA-13, CA-14, and CA-16, provided a CA-7 or CA-11 is included in the blend."

Revise Article 1020.05(d) of the Standard Specifications to read:

"(d) Class BD Concrete. The maximum mortar factor shall be 0.86."

Add the following to Article 1103.17 of the Standard Specifications:

"(k) Fogging Equipment. Fogging equipment shall consist of a mechanically operated, pressurized system using a triple headed nozzle or an equivalent nozzle. The fogging nozzle shall be capable of producing a fine fog mist that will increase the relative humidity of the air just above the fresh concrete surface without accumulating any water on the concrete. The fogging equipment shall be mounted behind the roller and pan of finishing machine or on a separate foot bridge. Controls shall be designed to vary the volume of water flow, be easily accessible and immediately shut off the water when in the off position. Hand held fogging equipment will not be allowed."

80066

**BUTT JOINTS (BDE)**

Effective: April 1, 2004

Revised: April 1, 2005

Revise Article 406.18 of the Standard Specifications to read:

**“406.18 Butt Joints.** Butt joints shall be constructed according to the details shown on the plans. The surface removal shall be performed according to Section 440. Construction of butt joints shall not begin prior to beginning general operations on the project.

When butt joints are to be constructed under traffic, temporary ramps shall be constructed and maintained at both the upstream and downstream ends of the surface removal areas immediately upon completion of the surface removal operation. The temporary ramps shall be constructed by the following methods.

- (a) Temporary Bituminous Ramps. Temporary bituminous ramps shall have a minimum taper rate of 1:40 (V:H). The bituminous material used shall meet the approval of the Engineer. Cold-milled bituminous tailings will not be acceptable.
- (b) Temporary Rubber Ramps. Temporary rubber ramps shall only be used on roadways with permanent posted speeds of 55 mph or less. The ramps shall have a minimum taper rate of 1:30 (V:H). The leading edge of the rubber ramp shall have a maximum thickness of 6 mm (1/4 in.) and the trailing edge shall match the height of the adjacent pavement  $\pm$  6 mm (1/4 in.).

The rubber material shall conform to the following.

| Property                    | Test Method | Requirement             |
|-----------------------------|-------------|-------------------------|
| Durometer Hardness, Shore A | ASTM D 2240 | 80 $\pm$ 10             |
| Tensile Strength            | ASTM D 412  | 5500 kPa (800 psi) min. |
| Elongation, percent         | ASTM D 412  | 100 min.                |
| Specific Gravity            | ASTM D 297  | 1.1-1.3                 |
| Brittleness                 | ASTM D 746  | -40 °C (-40 °F)         |

The rubber ramps shall be installed according to the manufacturer’s specifications and fastened with the anchors provided. Rubber ramps that fail to stay in place or create a traffic hazard shall be replaced immediately with temporary bituminous ramps at the Contractor’s expense.

The temporary ramps shall be removed just prior to placing the proposed surface course. If work is suspended for the winter season prior to completion of surface course construction, precut butt joints shall be filled to the elevation of the existing pavement surface with compacted bituminous concrete surface course or binder course.”

80118

**COARSE AGGREGATE FOR TRENCH BACKFILL, BACKFILL AND BEDDING (BDE)**

Effective: April 1, 2001

Revised: November 1, 2003

Revise Article 208.02 of the Standard Specifications to read:

**“208.02 Materials.** Materials shall be according to the following Articles of Section 1000 – Materials:

- (a) Fine Aggregate (Note 1)..... 1003.04
- (b) Coarse Aggregate (Note 2)..... 1004.06

Note 1. The fine aggregate shall be moist to the satisfaction of the Engineer.

Note 2. The coarse aggregate shall be wet to the satisfaction of the Engineer.”

Revise the first sentence of the second paragraph of subparagraph (b) in Article 208.03 of the Standard Specifications to read:

"Any material meeting the requirements of Articles 1003.04 or 1004.06 which has been excavated from the trenches shall be used for backfilling the trenches."

Add the following to the end of Article 542.02 of the Standard Specifications:

- “(bb) Fine Aggregate (Note 1)..... 1003.04
- (cc) Coarse Aggregate (Note 2)..... 1004.06

Note 1. The fine aggregate shall be moist to the satisfaction of the Engineer.

Note 2. The coarse aggregate shall be wet to the satisfaction of the Engineer.”

Revise the first and second sentences of the second paragraph of subparagraph (a) of Article 542.04 of the Standard Specifications to read:

"The unstable and unsuitable material shall be removed to a depth determined by the Engineer and for a width of one diameter (or equivalent diameter) of the pipe on each side of the pipe culvert, and replaced with aggregate. Rock shall be removed to an elevation 300 mm (1 ft) lower than the bottom of the pipe or to a depth equal to 40 mm/m (1/2 in./ft) of ultimate fill height over the top of the pipe culvert, whichever is the greater depth, and for a width as specified in (b) below, and replaced with aggregate."

Revise the second paragraph of subparagraph (c) of Article 542.04 of the Standard Specifications to read:



"Well compacted aggregate, at least 100 mm (4 in.) in depth below the pipe culvert, shall be placed the entire width of the trench and for the length of the pipe culvert, except well compacted impervious material shall be used for the outer 1 m (3 ft) at each end of the pipe. When the trench has been widened by the removal and replacement of unstable or unsuitable material, the foundation material shall be placed for a width not less than the above specified widths on each side of the pipe. The aggregate and impervious material shall be approved by the Engineer and shall be compacted to the Engineer's satisfaction by mechanical means."

Revise subparagraph (e) of Article 542.04 of the Standard Specifications to read:

"(e) Backfilling. As soon as the condition of the pipe culvert will permit, the entire width of the trench shall be backfilled with aggregate to a height of at least the elevation of the center of the pipe. The aggregate shall be placed longitudinally along the pipe culvert, except at the outer 1 m (3 ft) at each end of the culvert which shall be backfilled with impervious material. The elevation of the backfill material on each side of the pipe shall be the same. The space under the pipe shall be completely filled. The aggregate and impervious material shall be placed in 200 mm (8 in.) layers, loose measurement. When using PVC, PE, or corrugated metal pipe, the aggregate shall be continued to a height of at least 300 mm (1 ft) above the top of the pipe and compacted to a minimum of 85 percent of standard lab density by mechanical means. When reinforced concrete pipes are used and the trench is within 600 mm (2 ft) of the pavement structure, the backfill shall be compacted to a minimum of 85 percent of standard lab density by mechanical means.

When using PVC, PE, or corrugated metal pipe a minimum of 300 mm (1 ft) of cover from the top of the pipe to the top of the subgrade will be required.

The installed pipe and its embedment shall not be disturbed when using movable trench boxes and shields, sheet pile, or other trench protection.

The remainder of the trench shall be backfilled with select material, from excavation or borrow, free from large or frozen lumps, clods or rock, meeting the approval of the Engineer. The material shall be placed in layers not exceeding 200 mm (8 in.) in depth, loose measurement and compacted to 95 percent of the standard laboratory density. Compaction shall be obtained by use of mechanical tampers or with approved vibratory compactors. Before compacting, each layer shall be wetted or dried to bring the moisture content within the limits of 80 to 110 percent of optimum moisture content determined according to AASHTO T 99 (Method C). All backfill material shall be deposited in the trench or excavation in such a manner as not to damage the culvert. The filling of the trench shall be carried on simultaneously on both sides of the pipe. The Contractor may, at his/her expense, backfill the entire trench with aggregate in lieu of select material. The aggregate shall be compacted to the satisfaction of the Engineer by mechanical means.

The backfill material for all trenches and excavations made in the subgrade of the proposed improvement, and for all trenches outside of the subgrade where the inner edge of the trench is within 600 mm (2 ft) of the edge of the proposed pavement, curb, gutter, curb and gutter, stabilized shoulder, or sidewalk shall be according to Section 208. The trench backfill material shall be compacted to a minimum of 85 percent of standard lab density by mechanical means.

The Contractor may, at his/her expense, backfill the entire trench with controlled low strength material meeting the approval of the Engineer.

When the trench has been widened for the removal and replacement of unstable or unsuitable material, the backfilling with aggregate and impervious material, will be required for a width of at least the specified widths on each side of the pipe. The remaining width of each layer may be backfilled with select material. Each 200 mm (8 in.) layer for the entire trench width shall be completed before beginning the placement of the next layer."

Revise subparagraph (b) of Article 542.05 of the Standard Specifications to read:

"(b) Embankment. Embankment extending to an elevation of 300 mm (1 ft) over the top of the pipe shall be constructed according to Article 542.04(f), except the material up to the elevation of the center of the pipe and extending to a width of at least 450 mm (18 in.) on each side of the pipe, exclusive of the outer 1 m (3 ft) at each end of the pipe, shall consist of aggregate. At the outer 1 m (3 ft) at each end of the culvert, impervious material shall be used."

Add the following paragraph after the first paragraph of Article 542.10 of the Standard Specifications:

"Trench backfill will be measured for payment according to Article 208.03."

Add the following paragraph after the third paragraph of Article 542.11 of the Standard Specifications:

"Trench backfill will be paid for according to Article 208.04."

Add the following to of Article 550.02 of the Standard Specifications:

|                                    |         |
|------------------------------------|---------|
| "(m) Fine Aggregate (Note 2).....  | 1003.04 |
| (n) Coarse Aggregate (Note 3)..... | 1004.06 |

Note 2. The fine aggregate shall be moist to the satisfaction of the Engineer.

Note 3. The coarse aggregate shall be wet to the satisfaction of the Engineer."

Revise the first two sentences of the third paragraph of Article 550.04 of the Standard Specifications to read:

"Well compacted, aggregate bedding material at least 100 mm (4 in.) in depth below the pipe, shall be placed for the entire width of the trench and length of the pipe. The aggregate shall be compacted to the satisfaction of the Engineer by mechanical means."

Revise Article 550.07 of the Standard Specifications to read:

**"550.07 Backfilling.** As soon as the condition of the pipe will permit, the entire width of the trench shall be backfilled with aggregate to a height of at least the elevation of the center of the pipe. The aggregate shall be placed longitudinally along the pipe. The elevation of the backfill material on each side of the pipe shall be the same. The space under the pipe shall be completely filled. The aggregate backfill material shall be placed in 200 mm (8 in.) layers, loose measurement and compacted to the satisfaction of the Engineer by mechanical means. When using PVC pipe, the aggregate shall be continued to a height of at least 300 mm (12 in.) above the top of the pipe.

The installed pipe and its embedment shall not be disturbed when using movable trench boxes and shields, sheet pile, or other trench protection.

The remainder of the trench and excavation shall be backfilled to the natural line or finished surface as rapidly as the condition of the sewer will permit. The backfill material shall consist of suitable excavated material from the trench or of trench backfill as herein specified. All backfill material shall be deposited in the trench or excavation in such a manner as not to damage the sewer and shall be compacted to the satisfaction of the Engineer by mechanical means. The filling of the trench shall be carried on simultaneously on both sides of the pipe.

The backfill material for trenches and excavation made in the subgrade of the proposed improvement, and for all trenches outside of the subgrade where the inner edge of the trench is within 600 mm (2 ft) of the edge of the proposed pavement, curb, gutter, curb and gutter, stabilized shoulder or sidewalk shall be according to Section 208. The backfill material shall be compacted to 85 percent of standard lab density by mechanical means.

All backfill material up to a height of 300 mm (1 ft) above the pipe shall be deposited in uniform layers not exceeding 200 mm (8 in.) thick, loose measurement. The material in each layer shall be compacted to the satisfaction of the Engineer by mechanical means. The backfilling above this height shall be done according to Method 1, 2 or 3 as described below, with the following exceptions.

When trench backfill or excavated material meeting the requirements of Section 208 is required above the first 300 mm (1 ft) of the pipe, the layers shall not exceed 200 mm (8 in.). Gradations CA6 or CA10 shall not be used with Method 2 or Method 3.

Method 1. The material shall be deposited in uniform layers not exceeding 300 mm (1 ft) thick, loose measurement, and each layer shall be compacted to the satisfaction of the Engineer by mechanical means.

Method 2. The material shall be deposited in uniform layers not exceeding 300 mm (1 ft) thick, loose measurement, and each layer shall be either inundated or deposited in water.

Method 3. The trench shall be backfilled with loose material, and settlement secured by introducing water through holes jetted into the backfill to a point approximately 600 mm (2 ft) above the top of the pipe. The holes shall be spaced as directed by the Engineer but shall be no farther than 2 m (6 ft) apart.

The water shall be injected at a pressure just sufficient to sink the holes at a moderate rate of speed. The pressure shall be such that the water will not cut cavities in the backfill material nor overflow the surface. If water does overflow the surface, it shall be drained into the jetted holes by means of shallow trenches.

Water shall be injected as long as it will be absorbed by the backfill material and until samples taken from test holes in the trench show a satisfactory moisture content. The Contractor shall bore the test holes not more than 15 m (50 ft) apart and at such other locations in the trench designated by the Engineer. As soon as the watersoaking has been completed, all holes shall be filled with soil and compacted by ramming with a tool approved by the Engineer.

Backfill material which has been watersoaked shall be allowed to settle and dry for at least 10 days before any surface course or pavement is constructed on it. The length of time may be altered, if deemed desirable, by the Engineer. Where the inner edge of the trench is within 600 mm (2 ft) of the edge of the proposed pavement, curb, gutter, curb and gutter, stabilized shoulder or sidewalk, the provisions of this paragraph shall also apply.

At the end of the settling and drying period, the crusted top of the backfill material shall be scarified and, if necessary, sufficient backfill material added, as specified in Method 1, to complete the backfilling operations.

The method used for backfilling and compacting the backfill material shall be the choice of the Contractor. If the method used does not produce results satisfactory to the Engineer, the Contractor will be required to alter or change the method being used so the resultant backfill will be satisfactory to the Engineer. Should the Contractor be required to alter or change the method being used, no additional compensation will be allowed for altering or changing the method.

The Contractor may, at his/her expense, backfill the entire trench with controlled low strength material meeting the approval of the Engineer.

When sheeting and bracing have been used, sufficient bracing shall be left across the trench as the backfilling progresses to hold the sides firmly in place without caving or settlement. This bracing shall be removed as soon as practicable. Any depressions which may develop within the area involved in the construction operation due to settlement of the backfilling material shall be filled in a manner approved by the Engineer.

When the Contractor constructs the trench with sloped or benched sides according to Article 550.04, backfilling for the full width of the excavation shall be as specified, except no additional compensation will be allowed for trench backfill material required outside the vertical limits of the specified trench width.

Whenever excavation is made for installing sewer pipe across earth shoulders or private property, the topsoil disturbed by excavation operations shall be replaced as nearly as possible in its original position, and the whole area involved in the construction operations shall be left in a neat and presentable condition.

When using any PVC pipe, the pipe shall be backfilled with aggregate to 300 mm (1 ft) over the top of the pipe and compacted to a minimum of 85 percent of standard lab density by mechanical means.

When reinforced concrete pipes are used and the trench is within 600 mm (2 ft) of the pavement structure, the backfill shall be compacted to a minimum of 85 percent of standard lab density by mechanical means.

Deflection Testing for Storm Sewers. All PVC storm sewers will be tested for deflection not less than 30 days after the pipe is installed and the backfill compacted.

For PVC storm sewers with diameters 600 mm (24 in.) or smaller, a mandrel drag shall be used for deflection testing. For PVC storm sewers with diameters over 600 mm (24 in.), deflection measurements other than by a mandrel drag shall be used.

Where the mandrel is used, the mandrel shall be furnished by the Contractor and pulled by hand through the pipeline with a suitable rope or cable connected to each end. Winching or other means of forcing the deflection gauge through the pipeline will not be allowed.

The mandrel shall be of a shape similar to that of a true circle enabling the gauge to pass through a satisfactory pipeline with little or no resistance. The mandrel shall be of a design to prevent it from tipping from side to side and to prevent debris build-up from occurring between the channels of the adjacent fins or legs during operation. Each end of the core of the mandrel shall have fasteners to which the pulling cables can be attached. The mandrel shall have 9, various sized fins or legs of appropriate dimension for various diameter pipes. Each fin or leg shall have a permanent marking that states its designated pipe size and percent of deflection allowable.

The outside diameter of the mandrel shall be 95 percent of the base inside diameter, where the base inside diameter is:

For all PVC pipe (as defined using ASTM D 3034 methodology):

If the pipe is found to have a deflection greater than specified, that pipe section shall be removed, replaced, and retested."

Revise subparagraph (c) of Article 1003.04 of the Standard Specifications to read:

"(c) Gradation. The fine aggregate gradation shall be as follows:

Backfill, bedding and trench backfill for pipe culverts and storm sewers FA 1, FA 2, FA 6, or FA 21  
Porous granular embankment and backfill, french drains, and sand backfill for  
underdrains FA 1, FA 2, or FA20 (Note 1)

Note 1: For FA 1, FA 2, and FA 20 the percent passing the 75  $\mu$ m (No. 200) sieve shall  
be  $2 \pm 2$ ."

Revise the title of Article 1004.06 of the Standard Specifications to read:

**"Coarse Aggregate for Blotter, Embankment, Backfill, Trench Backfill, French Drains,  
and Bedding."**

Add the following to the end of subparagraph (c) of Article 1004.06 of the Standard  
Specifications:

"Backfill, bedding, and trench backfill for pipe culverts and storm sewers CA 6, CA 10, and CA 18"

80051

## **CONCRETE ADMIXTURES (BDE)**

Effective: January 1, 2003

Revised: July 1, 2004

Revise Article 1020.05(b) of the Standard Specifications to read:

"(b) Admixtures. Except as specified, the use of admixtures to increase the workability or to  
accelerate the hardening of the concrete will be permitted only when approved in writing  
by the Engineer. The Department will maintain an Approved List of Concrete  
Admixtures. When the Department permits the use of a calcium chloride accelerator, it  
shall be according to Article 442.02, Note 5.

When the atmosphere or concrete temperature is 18 °C (65 °F) or higher, a retarding  
admixture meeting the requirements of Article 1021.03 shall be used in the Class BD  
Concrete and portland cement concrete bridge deck overlays. The amount of retarding  
admixture to be used will be determined by the Engineer. The proportions of the  
ingredients of the concrete shall be the same as without the retarding admixture except  
that the amount of mixing water shall be reduced, as may be necessary, in order to  
maintain the consistency of the concrete as required. In addition, a high range water-  
reducing admixture shall be used in Class BD Concrete. The amount of high range  
water-reducing admixture will be determined by the Engineer. At the option of the  
Contractor, a water-reducing admixture may be used. Type I cement shall be used.

For Class PC and PS Concrete, a retarding admixture may be added to the concrete  
mixture when the concrete temperature is 18 °C (65 °F) or higher. Other admixtures  
may be used when approved by the Engineer, or if specified by the contract. If an  
accelerating admixture is permitted by the Engineer, it shall be the non-chloride type.

At the Contractor's option, admixtures in addition to an air-entraining admixture may be used for Class PP-1 concrete. The accelerator shall be the non-chloride type. If a water-reducing or retarding admixture is used, the cement factor may be reduced a maximum 18 kg/cu m (0.30 hundredweight/cu yd). If a high range water-reducing admixture is used, the cement factor may be reduced a maximum 36 kg/cu m (0.60 hundredweight/cu yd). Cement factor reductions shall not be cumulative when using multiple admixtures. An accelerator shall always be added prior to a high range water-reducing admixture, if both are used.

If Class C fly ash or ground granulated blast-furnace slag is used in Class PP-1 concrete, a water-reducing or high range water-reducing admixture shall be used. However, the cement factor shall not be reduced if a water-reducing, retarding, or high range water-reducing admixture is used. In addition, an accelerator shall not be used.

For Class PP-2 or PP-3 concrete, a non-chloride accelerator followed by a high range water-reducing admixture shall be used, in addition to the air-entraining admixture. For Class PP-3 concrete, the non-chloride accelerator shall be calcium nitrite.

For Class PP-2 or PP-3 concrete, the Contractor has the option to use a water-reducing admixture. A retarding admixture shall not be used unless approved by the Engineer. A water-reducing, retarding, or high range water-reducing admixture shall not be used to reduce the cement factor.

When the air temperature is less than 13 °C (55 °F) for Class PP-1 or PP-2 concrete, the non-chloride accelerator shall be calcium nitrite.

For Class PP-4 concrete, a high range water-reducing admixture shall be used in addition to the air-entraining admixture. The Contractor has the option to use a water-reducing admixture. An accelerator shall not be used. For stationary or truck mixed concrete, a retarding admixture shall be used to allow for haul time. The Contractor has the option to use a mobile portland cement concrete plant according to Article 1103.04, but a retarding admixture shall not be used unless approved by the Engineer. A water-reducing, retarding, or high range water-reducing admixture shall not be used to reduce the cement factor.

If the Department specifies a calcium chloride accelerator for Class PP-1 concrete, the maximum chloride dosage shall be 1.0 L (1.0 quart) of solution per 45 kg (100 lb) of cement. The dosage may be increased to a maximum 2.0 L (2.0 quarts) per 45 kg (100 lb) of cement if approved by the Engineer. If the Department specifies a calcium chloride accelerator for Class PP-2 concrete, the maximum chloride dosage shall be 1.3 L (1.3 quarts) of solution per 45 kg (100 lb) of cement. The dosage may be increased to a maximum 2.6 L (2.6 quarts) per 45 kg (100 lb) of cement if approved by the Engineer.

For Class PV, MS, SI, RR, SC and SH concrete, at the option of the Contractor, or when specified by the Engineer, a water-reducing admixture or a retarding admixture may be used. The amount of water-reducing admixture or retarding admixture permitted will be determined by the Engineer. The air-entraining admixture and other admixtures shall be added to the concrete separately, and shall be permitted to intermingle only after they have separately entered the concrete batch. The sequence, method and equipment for adding the admixtures shall be approved by the Engineer. The water-reducing admixture shall not delay the initial set of the concrete by more than one hour. Type I cement shall be used.

When a water-reducing admixture is added, a cement factor reduction of up to 18 kg/cu m (0.30 hundredweight/cu yd), from the concrete designed for a specific slump without the admixture, will be permitted for Class PV, MS, SI, RR, SC and SH concrete. When an approved high range water-reducing admixture is used, a cement factor reduction of up to 36 kg/cu m (0.60 hundredweight/cu yd), from a specific water cement/ratio without the admixture, will be permitted based on a 14 percent minimum water reduction. This is applicable to Class PV, MS, SI, RR, SC and SH concrete. A cement factor below 320 kg/cu m (5.35 hundredweight/cu yd) will not be permitted for Class PV, MS, SI, RR, SC and SH concrete. A cement factor reduction will not be allowed for concrete placed underwater. Cement factor reductions shall not be cumulative when using multiple admixtures.

For use of admixtures to control concrete temperature, refer to Articles 1020.14(a) and 1020.14(b).

The maximum slumps given in Table 1 may be increased to 175 mm (7 in.) when a high range water-reducing admixture is used for all classes of concrete except Class PV and PP.”

Revise Section 1021 of the Standard Specifications to read:

#### **“SECTION 1021. CONCRETE ADMIXTURES”**

**1021.01 General.** Admixtures shall be furnished in liquid form ready for use. The admixtures may be delivered in the manufacturer's original containers, bulk tank trucks or such containers or tanks as are acceptable to the Engineer. Delivery shall be accompanied by a ticket which clearly identifies the manufacturer and trade name of the material. Containers shall be readily identifiable to the satisfaction of the Engineer as to manufacturer and trade name of the material they contain.

Prior to inclusion of a product on the Department's Approved List of Concrete Admixtures, the manufacturer shall submit a report prepared by an independent laboratory accredited by the AASHTO Accreditation Program. The report shall show the results of physical tests conducted no more than five years prior to the time of submittal, according to applicable specifications.



Tests shall be conducted using materials and methods specified on a "test" concrete and a "reference" concrete, together with a certification that no changes have been made in the formulation of the material since the performance of the tests. Per the manufacturer's option, the cement content for all required tests shall either be according to applicable specifications or 335 kg/cu m (5.65 cwt/cu yd). Compressive strength test results for six months and one year will not be required.

In addition to the report, the manufacturer shall submit AASHTO T 197 water content and set time test results on the standard cement used by the Department. The test and reference concrete mixture shall contain a cement content of 335 kg/cu m (5.65 cwt/cu yd). The manufacturer may select their lab or an independent lab to perform this testing. The laboratory is not required to be accredited by the AASHTO Accreditation Program.

Prior to the approval of an admixture, the Engineer may conduct all or part of the applicable tests on a sample that is representative of the material to be furnished. The test and reference concrete mixtures tested by the Engineer will contain a cement content of 335 kg/cu m (5.65 cwt/cu yd). For freeze-thaw testing, the Department will perform the test according to Illinois Modified AASHTO T 161, Procedure B.

The manufacturer shall include in the submittal the following information according to ASTM C 494; the average and manufacturing range of specific gravity, the average and manufacturing range of solids in the solution, and the average and manufacturing range of pH. The submittal shall also include an infrared spectrophotometer trace no more than five years old.

When test results are more than seven years old, the manufacturer shall re-submit the infrared spectrophotometer trace and the report prepared by an independent laboratory accredited by the AASHTO Accreditation Program.

All admixtures, except chloride-based accelerators, shall contain no more than 0.3 percent chloride by mass (weight).

**1021.02 Air-Entraining Admixtures.** Air-entraining admixtures shall conform to the requirements of AASHTO M 154.

If the manufacturer certifies that the air-entraining admixture is an aqueous solution of Vinsol resin that has been neutralized with sodium hydroxide (caustic soda), testing for compliance with the requirements may be waived by the Engineer. In the certification, the manufacturer shall show complete information with respect to the formulation of the solution, including the number of parts of Vinsol resin to each part of sodium hydroxide. Before the approval of its use is granted, the Engineer will test the solution for its air-entraining quality in comparison with a solution prepared and kept for that purpose.

**1021.03 Retarding and Water-Reducing Admixtures.** The admixture shall comply with the following requirements:

- (a) The retarding admixture shall comply with the requirements of AASHTO M 194, Type B (retarding) or Type D (water-reducing and retarding).

- (b) The water-reducing admixture shall comply with the requirements of AASHTO M 194, Type A.
- (c) The high range water-reducing admixture shall comply with the requirements of AASHTO M 194, Type F (high range water-reducing) or Type G (high range water-reducing and retarding).

When a Type F or Type G high range water-reducing admixture is used, water-cement ratios shall be a minimum of 0.32.

Type F or Type G admixtures may be used, subject to the following restrictions:

For Class MS, SI, RR, SC and SH concrete, the water-cement ratio shall be a maximum of 0.44.

The Type F or Type G admixture shall be added at the jobsite unless otherwise directed by the Engineer. The initial slump shall be a minimum of 40 mm (1 1/2 in.) prior to addition of the Type F or Type G admixture, except as approved by the Engineer.

When a Type F or Type G admixture is used, retempering with water or with a Type G admixture will not be allowed. An additional dosage of a Type F admixture, not to exceed 40 percent of the original dosage, may be used to retemper concrete once, provided set time is not unduly affected. A second retempering with a Type F admixture may be used for all classes of concrete except Class PP and SC, provided that the dosage does not exceed the dosage used for the first retempering, and provided that the set time is not unduly affected. No further retempering will be allowed.

Air tests shall be performed after the addition of the Type F or Type G admixture.

**1021.04 Set Accelerating Admixtures.** The admixture shall comply with the requirements of AASHTO M 194, Type C (accelerating) or Type E (water reducing and accelerating)”

80094

### **CORRUGATED METAL PIPE CULVERTS (BDE)**

Effective: August 1, 2003

Revised: July 1, 2004

Revise the fourth paragraph of Article 542.04(d) of the Standard Specifications to read:

“When corrugated steel or aluminum alloy culvert pipe (including bituminous coated steel or aluminum and pre-coated steel) is used, the pipe shall be placed such that the longitudinal lap is placed at the sides and separate sections of pipe shall be joined with a hugger-type band. When the pipes are fabricated with a smooth sleeve-type coupler, the gasket shall meet the requirements of Article 1006.01.”

Add the following paragraph after the first paragraph of Article 1006.01 of the Standard Specifications:

“Round pipes 1200 mm (48 in.) in diameter and smaller may be fabricated with a smooth sleeve-type coupler. Gasket material on the smooth sleeve-type coupler shall be polyisoprene or equal with a durometer hardness of  $45\pm 5$  (ASTM D 2240, Shore A). Pipe used with smooth sleeve-type couplers shall contain a homing mark that indicates when the joint is tight. The homing mark shall consist of a painted stripe around the circumference of the male end of the pipe.”

Delete the last sentence of the first paragraph of Article 1006.01(a) of the Standard Specifications.

Add the following paragraph after the first paragraph of Article 1006.03 of the Standard Specifications:

“Round pipes 1200 mm (48 in.) in diameter and smaller may be fabricated with a smooth sleeve-type coupler. Gasket material on the smooth sleeve-type coupler shall be polyisoprene or equal with a durometer hardness of  $45\pm 5$  (ASTM D 2240, Shore A). Pipe used with smooth sleeve-type couplers shall contain a homing mark that indicates when the joint is tight. The homing mark shall consist of a painted stripe around the circumference of the male end of the pipe.”

80102

#### **CURING AND PROTECTION OF CONCRETE CONSTRUCTION (BDE)**

Effective: January 1, 2004

Revised: November 1, 2005

Revise the second and third sentences of the eleventh paragraph of Article 503.06 of the Standard Specifications to read:

“Forms on substructure units shall remain in place at least 24 hours. The method of form removal shall not result in damage to the concrete.”

Delete the twentieth paragraph of Article 503.22 of the Standard Specifications.

Revise the “Unit Price Adjustments” table of Article 503.22 of the Standard Specifications to read:

| "UNIT PRICE ADJUSTMENTS  |                                  |
|--|----------------------------------|
| Type of Construction   | Percent Adjustment in Unit Price |
| For concrete in substructures, culverts (having a waterway opening of more than 1 sq m (10 sq ft)), pump houses, and retaining walls (except concrete pilings, footings and foundation seals): |                                  |
| When protected by:   |                                  |
| Protection Method II   | 115%                             |
| Protection Method I  | 110%                             |
| For concrete in superstructures:   |                                  |
| When protected by:   |                                  |
| Protection Method II   | 123%                             |
| Protection Method I  | 115%                             |
| For concrete in footings:  |                                  |
| When protected by:   |                                  |
| Protection Method I, II or III   | 107%                             |
| For concrete in slope walls:   |                                  |
| When protected by:   |                                  |
| Protection Method I  | 107%"                            |

Delete the fourth paragraph of Article 504.05(a) of the Standard Specifications.

Revise the second and third sentences of the fifth paragraph of Article 504.05(a) of the Standard Specifications to read:

"All test specimens shall be cured with the units according to Article 1020.13."

Revise the first paragraph of Article 504.06(c)(6) of the Standard Specifications to read:

"Curing and Low Air Temperature Protection. The curing and protection for precast, prestressed concrete members shall be according to Article 1020.13 and this Article."

Revise the first sentence of the second paragraph of Article 504.06(c)(6) of the Standard Specifications to read:

"For curing, air vents shall be in place and shall be so arranged that no water can enter the void tubes during the curing of the members."

Revise the first sentence of the third paragraph of Article 504.06(c)(6) of the Standard Specifications to read:

"As soon as each member is finished, the concrete shall be covered with curing material according to Article 1020.13."

Revise the eighth paragraph of Article 504.06(c)(6) of the Standard Specifications to read:

“The prestressing force shall not be transferred to any member before the concrete has attained the compressive strength of 28,000 kPa (4000 psi) or other higher compressive release strength specified on the plans, as determined from tests of 150 mm (6 in.) by 300 mm (12 in.) cylinders cured with the member according to Article 1020.13. Members shall not be shipped until 28-day strengths have been attained and members have a yard age of at least 4 days.”

Delete the third paragraph of Article 512.03(a) of the Standard Specifications.

Delete the last sentence of the second paragraph of Article 512.04(d) of the Standard Specifications.

Revise the “Index Table of Curing and Protection of Concrete Construction” table of Article 1020.13 of the Standard Specifications to read:

| “INDEX TABLE OF CURING AND PROTECTION OF CONCRETE CONSTRUCTION |  |   |  |
|--|--|---|--|
| TYPE OF CONSTRUCTION   | CURING METHODS                             | CURING PERIOD DAYS                                  | LOW AIR TEMPERATURE PROTECTION METHODS     |
| <b>Cast-in-Place Concrete:</b> <sup>11/</sup>                  |  |   |  |
| Pavement   |  |   |  |
| Shoulder   | 1020.13(a)(1)(2)(3)(4)(5) <sup>3/ 5/</sup> | 3   | 1020.13(c)                                 |
| Base Course  |  |   |  |
| Base Course Widening   | 1020.13(a)(1)(2)(3)(4)(5) <sup>1/ 2/</sup> | 3   | 1020.13(c)                                 |
| Driveway   |  |   |  |
| Median   |  |   |  |
| Curb   |  |   |  |
| Gutter   | 1020.13(a)(1)(2)(3)(4)(5) <sup>4/ 5/</sup> | 3   | 1020.13(c) <sup>16/</sup>                  |
| Curb and Gutter  |  |   |  |
| Sidewalk   |  |   |  |
| Slope Wall   |  |   |  |
| Paved Ditch  |  |   |  |
| Catch Basin  |  |   |  |
| Manhole  | 1020.13(a)(1)(2)(3)(4)(5) <sup>4/</sup>    | 3   | 1020.13(c)                                 |
| Inlet  |  |   |  |
| Valve Vault  |  |   |  |
| Pavement Patching  | 1020.13(a)(1)(2)(3)(4)(5) <sup>2/</sup>    | 3 <sup>12/</sup>                                    | 1020.13(c)                                 |
| Pavement Replacement   | 1020.13(a)(1)(2)(3)(4)(5) <sup>1/ 2/</sup> | 3   | 442.06(h) and 1020.13(c)                   |
| Railroad Crossing  | 1020.13(a)(3)(5)                           | 1   | 1020.13(c)                                 |
| Piles  | 1020.13(a)(3)(5)                           | 7   | 1020.13(e)(1)(2)(3)                        |
| Footings   |  |   |  |
| Foundation Seals   | 1020.13(a)(1)(2)(3)(4)(5) <sup>4/ 6/</sup> | 7   | 1020.13(e)(1)(2)(3)                        |
| Substructure   | 1020.13(a)(1)(2)(3)(4)(5) <sup>1/ 7/</sup> | 7   | 1020.13(e)(1)(2)(3)                        |
| Superstructure (except deck)                                   | 1020.13(a)(1)(2)(3)(5) <sup>8/</sup>       | 7   | 1020.13(e)(1)(2)                           |
| Deck   | 1020.13(a)(5)                              | 7   | 1020.13(e)(1)(2) <sup>17/</sup>            |
| Retaining Walls  | 1020.13(a)(1)(2)(3)(4)(5) <sup>1/ 7/</sup> | 7   | 1020.13(e)(1)(2)                           |
| Pump Houses  | 1020.13(a)(1)(2)(3)(4)(5) <sup>1/</sup>    | 7   | 1020.13(e)(1)(2)                           |
| Culverts   | 1020.13(a)(1)(2)(3)(4)(5) <sup>4/ 6/</sup> | 7   | 1020.13(e)(1)(2) <sup>18/</sup>            |
| Other Incidental Concrete                                      | 1020.13(a)(1)(2)(3)(5)                     | 3   | 1020.13(c)                                 |
| <b>Precast Concrete:</b> <sup>11/</sup>                        |  |   |  |
| Bridge Beams   |  |   |  |
| Piles  |  |   |  |
| Bridge Slabs   | 1020.13(a)(3)(5) <sup>9/ 10/</sup>         | As required. <sup>13/</sup>                         | 504.06(c)(6), 1020.13(e)(2) <sup>19/</sup> |
| Nelson Type Structural Member                                  |  |   |  |
| All Other Precast Items  | 1020.13(a)(3)(4)(5) <sup>2/ 9/ 10/</sup>   | As required. <sup>14/</sup>                         | 504.06(c)(6), 1020.13(e)(2) <sup>19/</sup> |
| <b>Precast, Prestressed Concrete:</b> <sup>11/</sup>           |  |   |  |
| All Items  | 1020.13(a)(3)(5) <sup>9/ 10/</sup>         | Until strand tensioning <sup>15/</sup> is released. | 504.06(c)(6), 1020.13(e)(2) <sup>19/</sup> |

Notes-General:

- 1/ Type I, membrane curing only
- 2/ Type II, membrane curing only
- 3/ Type III, membrane curing only
- 4/ Type I, II and III membrane curing
- 5/ Membrane curing will not be permitted between November 1 and April 15.
- 6/ The use of water to inundate footings, foundation seals or the bottom slab of culverts is permissible when approved by the Engineer, provided the water temperature can be maintained at 7 °C ( 45 °F) or higher.
- 7/ Asphalt Emulsion for Waterproofing may be used in lieu of other curing methods when specified and permitted according to Article 503.18.
- 8/ On non-traffic surfaces which receive protective coat according to Article 503.19, a linseed oil emulsion curing compound may be used as a substitute for protective coat and other curing methods. The linseed emulsion curing compound will be permitted between April 16 and October 31 of the same year, provided it is applied with a mechanical sprayer according to Article 1101.09 (b), and meets the material requirements of Article 1022.07.
- 9/ Steam curing (heat and moisture) is acceptable and shall be accomplished by the method specified in Article 504.06(c)(6).
- 10/ A moist room according to AASHTO M 201 is acceptable for curing.
- 11/ If curing is required and interrupted because of form removal for cast-in-place concrete items, precast concrete products, or precast prestressed concrete products, the curing shall be resumed within two hours from the start of the form removal.
- 12/ Curing maintained only until opening strength is attained, with a maximum curing period of three days.
- 13/ The curing period shall end when the concrete has attained the mix design strength. The producer has the option to discontinue curing when the concrete has attained 80 percent of the mix design strength or after seven days. All strength test specimens shall remain with the units and shall be subjected to the same curing method and environmental condition as the units, until the time of testing.
- 14/ The producer shall determine the curing period or may elect to not cure the product. All strength test specimens shall remain with the units and shall be subjected to the same curing method and environmental condition as the units, until the time of testing.
- 15/ The producer has the option to continue curing after strand release.
- 16/ When structural steel or structural concrete is in place above slope wall, Article 1020.13(c) shall not apply. The protection method shall be according to Article 1020.13(e)(1).
- 17/ When Article 1020.13(e)(2) is used to protect the deck, the housing may enclose only the bottom and sides. The top surface shall be protected according to Article 1020.13(e)(1).
- 18/ For culverts having a waterway opening of 1 sq m (10 sq ft) or less, the culverts may be protected according to Article 1020.13(e)(3).
- 19/ The seven day protection period in the first paragraph of Article 1020.13(e)(2) shall not apply. The protection period shall end when curing is finished. For the third paragraph of Article 1020.13(e)(2), the decrease in temperature shall be according to Article 504.06(c)(6)."

Add the following to Article 1020.13(a) of the Standard Specifications:

“(5) Wetted Cotton Mat Method. After the surface of concrete has been textured or finished, it shall be covered immediately with dry cotton mats. The cotton mats shall be placed in a manner which will not mar the concrete surface. A texture resulting from the cotton mat material is acceptable. The cotton mats shall then be wetted immediately and thoroughly soaked with a gentle spray of water. For bridge decks, a foot bridge shall be used to place and wet the cotton mats.

The cotton mats shall be maintained in a wetted condition until the concrete has hardened sufficiently to place soaker hoses without marring the concrete surface. The soaker hoses shall be placed on top of the cotton mats at a maximum 1.2 m (4 ft) spacing. The cotton mats shall be kept wet with a continuous supply of water for the remainder of the curing period. Other continuous wetting systems may be used if approved by the Engineer.

After placement of the soaker hoses, the cotton mats shall be covered with white polyethylene sheeting or burlap-polyethylene blankets.

For construction items other than bridge decks, soaker hoses or a continuous wetting system will not be required if the alternative method keeps the cotton mats wet. Periodic wetting of the cotton mats is acceptable.

For areas inaccessible to the cotton mats on bridge decks, curing shall be according to Article 1020.13(a)(3).”

Revise the first paragraph of Article 1020.13(c) of the Standard Specifications to read:

“Protection of Portland Cement Concrete, Other Than Structures, From Low Air Temperatures. When the official National Weather Service forecast for the construction area predicts a low of 0 °C (32 °F), or lower, or if the actual temperature drops to 0 °C (32 °F), or lower, concrete less than 72 hours old shall be provided at least the following protection:”

Delete Article 1020.13(d) and Articles 1020.13(d)(1),(2),(3),(4) of the Standard Specifications.

Revise the first five paragraphs of Article 1020.13(e) of the Standard Specifications to read:

“Protection of Portland Cement Concrete Structures From Low Air Temperatures. When the official National Weather Service Forecast for the construction area predicts a low below 7 °C (45 °F), or if the actual temperature drops below 7 °C (45 °F), concrete less than 72 hours old shall be provided protection. Concrete shall also be provided protection when placed during the winter period of December 1 through March 15. Concrete shall not be placed until the materials, facilities, and equipment for protection are approved by the Engineer.



When directed by the Engineer, the Contractor may be required to place concrete during the winter period. If winter construction is specified, the Contractor shall proceed with the construction, including concrete, excavation, pile driving, steel erection, and all appurtenant work required for the complete construction of the item, except at times when weather conditions make such operations impracticable.

Regardless of the precautions taken, the Contractor shall be responsible for protection of the concrete placed and any concrete damaged by cold temperatures shall be removed and replaced at no additional cost to the Department.”

Add the following at the end of the third paragraph of Article 1020.13(e)(1) of the Standard Specifications:

“The Contractor shall provide means for checking the temperature of the surface of the concrete during the protection period.”

Revise the second sentence of the first paragraph of Article 1020.13(e)(2) of the Standard Specifications to read:

“The Contractor shall provide means for checking the temperature of the surface of the concrete or air temperature within the housing during the protection period.”

Delete the last sentence of the first paragraph of Article 1020.13(e)(3) of the Standard Specifications.

Add the following Article to Section 1022 of the Standard Specifications:

**“1022.06 Cotton Mats.** Cotton mats shall consist of a cotton fill material, minimum 400 g/sq m (11.8 oz/sq yd), covered with unsized cloth or burlap, minimum 200 g/sq m (5.9 oz/sq yd), and be tufted or stitched to maintain stability.

Cotton mats shall be in a condition satisfactory to the Engineer. Any tears or holes in the mats shall be repaired.”

Add the following Article to Section 1022 of the Standard Specifications:

**“1022.07 Linseed Oil Emulsion Curing Compound.** Linseed oil emulsion curing compound shall be composed of a blend of boiled linseed oil and high viscosity, heavy bodied linseed oil emulsified in a water solution. The curing compound shall meet the requirements of a Type I according to Article 1022.01, except the drying time requirement will be waived. The oil phase shall be 50 ± 4 percent by volume. The oil phase shall consist of 80 percent by mass (weight) boiled linseed oil and 20 percent by mass (weight) Z-8 viscosity linseed oil. The water phase shall be 50 ± 4 percent by volume.”

Revise Article 1020.14 of the Standard Specifications to read:

**“1020.14 Temperature Control for Placement.** Temperature control for concrete placement shall be according to the following.

- (a) Temperature Control other than Structures. The temperature of the concrete immediately before placement shall be a minimum of 10 °C (50 °F) and a maximum of 32 °C (90 °F). Aggregates and/or water shall be heated or cooled as necessary to produce concrete within these temperature limits.

When the temperature of the plastic concrete reaches 30 °C (85 °F), an approved retarding admixture shall be used or the approved water reducing admixture in use shall have its dosage increased by 50 percent over the dosage recommended on the Department's Approved List of Concrete Admixtures for the temperature experienced. The amount of retarding admixture to be used will be determined by the Engineer. This requirement may be waived by the Engineer when fly ash compensated mixtures are used.

Plastic concrete temperatures up to 35 °C (96 °F), as placed, may be permitted provided job site conditions permit placement and finishing without excessive use of water on and/or overworking of the surface. The occurrence within 24 hours of unusual surface distress shall be cause to revert to a maximum 32 °C (90 °F) plastic concrete temperature.

Concrete shall not be placed when the air temperature is below 5 °C (40 °F) and falling or below 2 °C (35 °F), without permission of the Engineer. When placing of concrete is authorized during cold weather, the Engineer may require the water and/or the aggregates to be heated to between 20 °C (70 °F) and 65 °C (150 °F). The aggregates may be heated by either steam or dry heat prior to being placed in the mixer. The apparatus used shall heat the mass uniformly and shall be so arranged as to preclude the possible occurrence of overheated areas which might damage the materials. No frozen aggregates shall be used in the concrete.

For pavement patching, refer to Article 442.06(e) for additional information on temperature control for placement.

- (b) Temperature Control for Structures. The temperature of the concrete, as placed in the forms, shall be a minimum of 10 °C (50 °F) and a maximum of 32 °C (90 °F). Aggregates and/or water shall be heated or cooled as necessary to produce concrete within these temperature limits. When insulated forms are used, the temperature of the concrete mixture shall not exceed 25 °C (80 °F). If the Engineer determines that heat of hydration might cause excessive temperatures in the concrete, the concrete shall be placed at a temperature between 10 °C (50 °F) and 15 °C (60 °F). When concrete is placed in contact with previously placed concrete, the temperature of the concrete may be increased as required to offset anticipated heat loss.

Concrete shall not be placed when the air temperature is below 7 °C (45 °F) and falling or below 4 °C (40 °F), without permission of the Engineer. When placing of concrete is authorized during cold weather, the Engineer may require the water and/or the aggregates to be heated to between 20 °C (70 °F) and 65 °C (150 °F). The aggregates may be heated by either steam or dry heat prior to being placed in the mixer. The apparatus used shall heat the mass uniformly and shall be so arranged as to preclude the possible occurrence of overheated areas which might damage the materials. No frozen aggregates shall be used in the concrete.

When the temperature of the plastic concrete reaches 30 °C (85 °F), an approved retarding admixture shall be used or the approved water reducing admixture in use shall have its dosage increased by 50 percent over the dosage recommended on the Department's Approved List of Concrete Admixtures for the temperature experienced. The amount of retarding admixture to be used will be determined by the Engineer. This requirement may be waived by the Engineer when fly ash compensated mixtures are used.

- (c) Temperature. The concrete temperature shall be determined according to ASTM C 1064.”

80114

#### **DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION**

Effective: September 1, 2000

Revised: June 22, 2005

FEDERAL OBLIGATION. The Department of Transportation, as a recipient of federal financial assistance, is required to take all necessary and reasonable steps to ensure nondiscrimination in the award and administration of contracts. Consequently, the federal regulatory provisions of 49 CFR part 26 apply to this contract concerning the utilization of disadvantaged business enterprises. For the purposes of this Special Provision, a disadvantaged business enterprise (DBE) means a business certified by the Department in accordance with the requirements of 49 CFR part 26 and listed in the DBE Directory or most recent addendum.

STATE OBLIGATION. This Special Provision will also be used by the Department to satisfy the requirements of the Business Enterprise for Minorities, Females, and Persons with Disabilities Act, 30 ILCS 575. When this Special Provision is used to satisfy state law requirements on 100% state-funded contracts, the federal government has no involvement in such contracts (not a federal-aid contract) and no responsibility to oversee the implementation of this Special Provision by the Department on those contracts. DBE participation on 100% state-funded contracts will not be credited toward fulfilling the Department's annual overall DBE goal required by the US Department of Transportation to comply with the federal DBE program requirements.

CONTRACTOR ASSURANCE. The Contractor makes the following assurance and agrees to include the assurance in each subcontract that the Contractor signs with a subcontractor:

The Contractor, subrecipient, or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of contracts funded in whole or in part with federal or state funds. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate.

OVERALL GOAL SET FOR THE DEPARTMENT. As a requirement of compliance with 49 CFR part 26, the Department has set an overall goal for DBE participation in its federally assisted contracts. That goal applies to all federal-aid funds the Department will expend in its federally assisted contracts for the subject reporting fiscal year. The Department is required to make a good faith effort to achieve the overall goal. The dollar amount paid to all approved DBE firms performing work called for in this contract is eligible to be credited toward fulfillment of the Department's overall goal.

CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR. This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined that the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies. This determination is based on an assessment of the type of work, the location of the work, and the availability of DBE companies to do a part of the work. The assessment indicates that, in the absence of unlawful discrimination, and in an arena of fair and open competition, DBE companies can be expected to perform 17.00% of the work. This percentage is set as the DBE participation goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work. A bidder makes a good faith effort for award consideration if either of the following is done in accordance with the procedures set forth in this Special Provision:

- (a) The bidder documents that firmly committed DBE participation has been obtained to meet the goal; or
- (b) The bidder documents that a good faith effort has been made to meet the goal, even though the effort did not succeed in obtaining enough DBE participation to meet the goal.

DBE LOCATOR REFERENCES. Bidders may consult the DBE Directory as a reference source for DBE companies certified by the Department. In addition, the Department maintains a letting and item specific DBE locator information system whereby DBE companies can register their interest in providing quotes on particular bid items advertised for letting. Information concerning DBE companies willing to quote work for particular contracts may be obtained by contacting the Department's Bureau of Small Business Enterprises at telephone number (217)785-4611, or by visiting the Department's web site at [www.dot.il.gov](http://www.dot.il.gov).

BIDDING PROCEDURES. Compliance with the bidding procedures of this Special Provision is required prior to the award of the contract and the failure of the as-read low bidder to comply will render the bid not responsive.

- (a) In order to assure the timely award of the contract, the as-read low bidder shall submit a Disadvantaged Business Utilization Plan on Department form SBE 2026 within seven (7) working days after the date of letting. To meet the seven (7) day requirement, the bidder may send the Plan by certified mail or delivery service within the seven (7) working day period. If a question arises concerning the mailing date of a Plan, the mailing date will be established by the U.S. Postal Service postmark on the original certified mail receipt from the U.S. Postal Service or the receipt issued by a delivery service. It is the responsibility of the bidder to ensure that the postmark or receipt date is affixed within the seven (7) working days if the bidder intends to rely upon mailing or delivery to satisfy the submission day requirement. The Plan is to be submitted to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764 (Telefax: (217)785-1524). It is the responsibility of the bidder to obtain confirmation of telefax delivery. The Department will not accept a Utilization Plan if it does not meet the seven (7) day submittal requirement and the bid will be declared not responsive. In the event the bid is declared not responsive due to a failure to submit a Plan or failure to comply with the bidding procedures set forth herein, the Department may elect to cause the forfeiture of the penal sum of the bidder's proposal guaranty, and may deny authorization to bid the project if re-advertised for bids. The Department reserves the right to invite any other bidder to submit a Utilization Plan at any time for award consideration or to extend the time for award.
- (b) The Utilization Plan shall indicate that the bidder either has obtained sufficient DBE participation commitments to meet the contract goal or has not obtained enough DBE participation commitments in spite of a good faith effort to meet the goal. The Utilization Plan shall further provide the name, telephone number, and telefax number of a responsible official of the bidder designated for purposes of notification of plan approval or disapproval under the procedures of this Special Provision.
- (c) The Utilization Plan shall include a DBE Participation Commitment Statement, Department form SBE 2025, for each DBE proposed for the performance of work to achieve the contract goal. The signatures on these forms must be original signatures. All elements of information indicated on the said form shall be provided, including but not limited to the following:
- (1) The name and address of each DBE to be used;
  - (2) A description, including pay item numbers, of the commercially useful work to be done by each DBE;
  - (3) The price to be paid to each DBE for the identified work specifically stating the quantity, unit price, and total subcontract price for the work to be completed by the DBE. If partial pay items are to be performed by the DBE, indicate the portion of each item, a unit price where appropriate and the subcontract price amount;
  - (4) A commitment statement signed by the bidder and each DBE evidencing availability and intent to perform commercially useful work on the project; and

- (5) If the bidder is a joint venture comprised of DBE firms and non-DBE firms, the plan must also include a clear identification of the portion of the work to be performed by the DBE partner(s).
- (d) The contract will not be awarded until the Utilization Plan submitted by the bidder is approved. The Utilization Plan will be approved by the Department if the Plan commits sufficient commercially useful DBE work performance to meet the contract goal. The Utilization Plan will not be approved by the Department if the Plan does not commit sufficient DBE performance to meet the contract goal unless the bidder documents that it made a good faith effort to meet the goal. The good faith procedures of Section VIII of this special provision apply. If the Utilization Plan is not approved because it is deficient in a technical matter, unless waived by the Department, the bidder will be notified and will be allowed no less than a five (5) working day period in order to cure the deficiency.

CALCULATING DBE PARTICIPATION. The Utilization Plan values represent work anticipated to be performed and paid for upon satisfactory completion. The Department is only able to count toward the achievement of the overall goal and the contract goal the value of payments made for the work actually performed by DBE companies. In addition, a DBE must perform a commercially useful function on the contract to be counted. A commercially useful function is generally performed when the DBE is responsible for the work and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. The Department and Contractor are governed by the provisions of 49 CFR part 26.55(c) on questions of commercially useful functions as it affects the work. Specific counting guidelines are provided in 49 CFR part 26.55, the provisions of which govern over the summary contained herein.

- (a) DBE as the Contractor: 100% goal credit for that portion of the work performed by the DBE's own forces, including the cost of materials and supplies. Work that a DBE subcontracts to a non-DBE firm does not count toward the DBE goals.
- (b) DBE as a joint venture Contractor: 100% goal credit for that portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work performed by the DBE's own forces.
- (c) DBE as a subcontractor: 100% goal credit for the work of the subcontract performed by the DBE's own forces, including the cost of materials and supplies, excluding the purchase of materials and supplies or the lease of equipment by the DBE subcontractor from the prime Contractor or its affiliates. Work that a DBE subcontractor in turn subcontracts to a non-DBE firm does not count toward the DBE goal.
- (d) DBE as a trucker: 100% goal credit for trucking participation provided the DBE is responsible for the management and supervision of the entire trucking operation for which it is responsible. At least one truck owned, operated, licensed, and insured by the DBE must be used on the contract. Credit will be given for the full value of all such DBE trucks operated using DBE employed drivers. Goal credit will be limited to the value of the reasonable fee or commission received by the DBE if trucks are leased from a non-DBE company.

(e) DBE as a material supplier:

- (1) 60% goal credit for the cost of the materials or supplies purchased from a DBE regular dealer.
- (2) 100% goal credit for the cost of materials or supplies obtained from a DBE manufacturer.
- (3) 100% credit for the value of reasonable fees and commissions for the procurement of materials and supplies if not a regular dealer or manufacturer.

GOOD FAITH EFFORT PROCEDURES. If the bidder cannot obtain sufficient DBE commitments to meet the contract goal, the bidder must document in the Utilization Plan the good faith efforts made in the attempt to meet the goal. This means that the bidder must show that all necessary and reasonable steps were taken to achieve the contract goal. Necessary and reasonable steps are those which could reasonably be expected to obtain sufficient DBE participation. The Department will consider the quality, quantity, and intensity of the kinds of efforts that the bidder has made. Mere *pro forma* efforts are not good faith efforts; rather, the bidder is expected to have taken those efforts that would be reasonably expected of a bidder actively and aggressively trying to obtain DBE participation sufficient to meet the contract goal.

- (a) The following is a list of types of action that the Department will consider as part of the evaluation of the bidder's good faith efforts to obtain participation. These listed factors are not intended to be a mandatory checklist and are not intended to be exhaustive. Other factors or efforts brought to the attention of the Department may be relevant in appropriate cases, and will be considered by the Department.
  - (1) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBE companies that have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBE companies to respond to the solicitation. The bidder must determine with certainty if the DBE companies are interested by taking appropriate steps to follow up initial solicitations.
  - (2) Selecting portions of the work to be performed by DBE companies in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime Contractor might otherwise prefer to perform these work items with its own forces.
  - (3) Providing interested DBE companies with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.

- (4) a. Negotiating in good faith with interested DBE companies. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBE companies that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBE companies to perform the work.
    - b. A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBE companies is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also, the ability or desire of a bidder to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Bidders are not, however, required to accept higher quotes from DBE companies if the price difference is excessive or unreasonable.
  - (5) Not rejecting DBE companies as being unqualified without sound reasons based on a thorough investigation of their capabilities. The bidder's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal.
  - (6) Making efforts to assist interested DBE companies in obtaining bonding, lines of credit, or insurance as required by the recipient or Contractor.
  - (7) Making efforts to assist interested DBE companies in obtaining necessary equipment, supplies, materials, or related assistance or services.
  - (8) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBE companies.
- (b) If the Department determines that the bidder has made a good faith effort to secure the work commitment of DBE companies to meet the contract goal, the Department will award the contract provided that it is otherwise eligible for award. If the Department determines that a good faith effort has not been made, the Department will notify the bidder of that preliminary determination by contacting the responsible company official designated in the Utilization Plan. The preliminary determination shall include a statement of reasons why good faith efforts have not been found, and may include



additional good faith efforts that the bidder could take. The notification will designate a five (5) working day period during which the bidder shall take additional efforts. The bidder is not limited by a statement of additional efforts, but may take other action beyond any stated additional efforts in order to obtain additional DBE commitments. The bidder shall submit an amended Utilization Plan if additional DBE commitments to meet the contract goal are secured. If additional DBE commitments sufficient to meet the contract goal are not secured, the bidder shall report the final good faith efforts made in the time allotted. All additional efforts taken by the bidder will be considered as part of the bidder's good faith efforts. If the bidder is not able to meet the goal after taking additional efforts, the Department will make a pre-final determination of the good faith efforts of the bidder and will notify the designated responsible company official of the reasons for an adverse determination.

- (c) The bidder may request administrative reconsideration of a pre-final determination adverse to the bidder within the five (5) working days after the notification date of the determination by delivering the request to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764 (Telefax: (217)785-1524). Deposit of the request in the United States mail on or before the fifth business day shall not be deemed delivery. The pre-final determination shall become final if a request is not made and delivered. A request may provide additional written documentation and/or argument concerning the issue of whether an adequate good faith effort was made to meet the contract goal. In addition, the request shall be considered a consent by the bidder to extend the time for award. The request will be forwarded to the Department's Reconsideration Officer. The Reconsideration Officer will extend an opportunity to the bidder to meet in person in order to consider all issues of whether the bidder made a good faith effort to meet the goal. After the review by the Reconsideration Officer, the bidder will be sent a written decision within ten (10) working days after receipt of the request for reconsideration, explaining the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so. A final decision by the Reconsideration Officer that a good faith effort was made shall approve the Utilization Plan submitted by the bidder and shall clear the contract for award. A final decision that a good faith effort was not made shall render the bid not responsive.

**CONTRACT COMPLIANCE.** Compliance with this Special Provision is an essential part of the contract. The Department is prohibited by federal regulations from crediting the participation of a DBE included in the Utilization Plan toward either the contract goal or the Department's overall goal until the amount to be applied toward the goals has been paid to the DBE. The following administrative procedures and remedies govern the compliance by the Contractor with the contractual obligations established by the Utilization Plan. After approval of the Plan and award of the contract, the Utilization Plan and individual DBE Participation Statements become part of the contract. If the Contractor did not succeed in obtaining enough DBE participation to achieve the advertised contract goal, and the Utilization Plan was approved and contract awarded based upon a determination of good faith, the total dollar value of DBE work calculated in the approved Utilization Plan as a percentage of the awarded contract value shall become the amended contract goal.

- (a) No amendment to the Utilization Plan may be made without prior written approval from the Department's Bureau of Small Business Enterprises. All requests for amendment to the Utilization Plan shall be submitted to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764. Telephone number (217) 785-4611. Telefax number (217) 785-1524.
- (b) All work indicated for performance by an approved DBE shall be performed, managed, and supervised by the DBE executing the Participation Statement. The Contractor shall not terminate for convenience a DBE listed in the Utilization Plan and then perform the work of the terminated DBE with its own forces, those of an affiliate or those of another subcontractor, whether DBE or not, without first obtaining the written consent of the Bureau of Small Business Enterprises to amend the Utilization Plan. If a DBE listed in the Utilization Plan is terminated for reasons other than convenience, or fails to complete its work on the contract for any reason, the Contractor shall make good faith efforts to find another DBE to substitute for the terminated DBE. The good faith efforts shall be directed at finding another DBE to perform at least the same amount of work under the contract as the DBE that was terminated, but only to the extent needed to meet the contract goal or the amended contract goal. The Contractor shall notify the Bureau of Small Business Enterprises of any termination for reasons other than convenience, and shall obtain approval for inclusion of the substitute DBE in the Utilization Plan. If good faith efforts following a termination of a DBE for cause are not successful, the Contractor shall contact the Bureau and provide a full accounting of the efforts undertaken to obtain substitute DBE participation. The Bureau will evaluate the good faith efforts in light of all circumstances surrounding the performance status of the contract, and determine whether the contract goal should be amended.
- (c) The Contractor shall maintain a record of payments for work performed to the DBE participants. The records shall be made available to the Department for inspection upon request. After the performance of the final item of work or delivery of material by a DBE and final payment therefor to the DBE by the Contractor, but not later than thirty (30) calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Report on Department form SBE 2115 to the Regional Engineer. If full and final payment has not been made to the DBE, the Report shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes that the work has not been satisfactorily completed. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the DBE companies indicated in the Plan, the Department will deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages.
- (d) The Department reserves the right to withhold payment to the Contractor to enforce the provisions of this Special Provision. Final payment shall not be made on the contract until such time as the Contractor submits sufficient documentation demonstrating achievement of the goal in accordance with this Special Provision or after liquidated damages have been determined and collected.

- (e) Notwithstanding any other provision of the contract, including but not limited to Article 109.09 of the Standard Specifications, the Contractor may request administrative reconsideration of a decision to deduct the amount of the goal not achieved as liquidated damages. A request to reconsider shall be delivered to the Contract Compliance Section and shall be handled and considered in the same manner as set forth in paragraph (c) of "Good Faith Effort Procedures" of this Special Provision, except a final decision that a good faith effort was not made during contract performance to achieve the goal agreed to in the Utilization Plan shall be the final administrative decision of the Department.

80029

### **ELASTOMERIC BEARINGS (BDE)**

Effective: April 1, 2005

Revise Section 1083 of the Standard Specifications to read:

#### **"SECTION 1083. ELASTOMERIC BEARINGS**

**1083.01 Description.** Elastomeric bearings shall consist of steel laminated elastomeric pads or assemblies of steel laminated elastomeric pads with externally bonded structural steel bearing plates, structural steel top bearing plate, and required stainless steel and TFE sheets, as shown on the plans and as specified herein.

Shop drawings of the bearing assemblies shall be submitted to the Engineer. The bearing assemblies shall be furnished as a complete unit from one manufacturing source.

**1083.02 Materials.** Materials shall be according to the following.

- (a) Properties of the Elastomer. The elastomer compound used in the construction of the bearings shall contain only virgin crystallization resistant polychloroprene (neoprene) or virgin natural polyisoprene (natural rubber) as the raw polymer. All materials shall be new with no reclaimed material incorporated in the finished bearing. The elastomer compounds shall be classified as being of low-temperature, Grade 3, as specified by the minimum grade requirements of Table 14.7.5.2-2, "Low Temperature Zones and Minimum Grade of Elastomer", of the AASHTO LRFD Bridge Design Specification. Low temperature zones used in this table are as defined in Figure 14.7.5.2-1, "Temperature Zones", of the same publication.

The cured elastomer shall be according to the following requirements. The properties of the cured elastomeric compound material shall be determined using samples taken from actual bearings.

| Material <sup>1/ 2/</sup><br>Property | ASTM<br>Standard                  | Test Requirements                     | Polyisoprene<br>(Natural Rubber) | Polychloroprene<br>(Neoprene) |
|---------------------------------------|-----------------------------------|---------------------------------------|----------------------------------|-------------------------------|
| Physical<br>Properties                | D 2240                            | Hardness                              | 55 ± 5 Shore "A" points          | 55 ± 5 Shore "A" points       |
|                                       | D 412                             | Min. Tensile Strength                 | 15,500 kPa (2250 psi)            | 15,500 kPa (2250 psi)         |
|                                       |                                   | Min. Ultimate Elongation              | 400%                             | 400%                          |
| Heat<br>Resistance                    | D 573 at<br>Specified<br>Temp.    | Specified Temperature<br>of Test      | 70 °C (158 °F)                   | 100 °C (212 °F)               |
|                                       |                                   | Aging Time                            | 168 hours                        | 70 hours                      |
|                                       |                                   | Max. Change in<br>Durometer hardness  | +10 Shore "A" points             | +15 Shore "A" points          |
|                                       |                                   | Max. Change in Tensile<br>Strength    | -25%                             | -15%                          |
|                                       |                                   | Max. Change in Ultimate<br>Elongation | -25%                             | -40%                          |
| Adhesion <sup>3/</sup><br>to Steel    | Illinois Test<br>Procedure<br>603 | Bond Strength<br>(Peel Test)          | 7 N/mm (40 lb/in.)               | 7 N/mm (40 lb/in.)            |
|                                       | D 429, B                          | Adhesion Failure                      | R-80%                            | R-80%                         |

1/ All material tests shall be conducted at 23 ± 2°C (73 ± 4°F) unless otherwise noted.

2/ For the purpose of determining conformance with this specification, an observed or calculated value shall be rounded off to the nearest 100 kPa (10 psi) for tensile strength, to the nearest ten percent of elongation, and to the nearest one percent for change in aged tensile and aged elongation. Hardness and aged hardness shall be rounded off to nearest point according to AASHTO R 11.

3/ The adhesion failure requirement is waived if bond strength equals or exceeds 14 N/mm (80 lb/in.).

(b) TFE Material. The TFE resin shall be 100 percent virgin material, premium grade, meeting the requirements of ASTM D 4894. The TFE sheet (polytetrafluoroethylene sheet, premium grade) shall consist of pure TFE resin, compression molded and skived into sheets of the required thickness. The finished sheet shall conform to the following.

| ASTM Standard  | Physical Properties  |
|----------------|--|
| D 638M (D 638) | Tensile strength min, kPa (psi) 19,300 (2800)  |
| D 638M (D 638) | Elongation, min % 200  |
| D 792          | Specific Gravity 2.15-2.20   |
| D 2240         | Hardness, Durometer D 50-65  |
| D 621          | Deformation Under Load<br>23 °C/690 kPa/24 hrs (73 °F/100 psi/24 hrs), % 2-3<br>50 °C/8,300 kPa/24 hrs (122 °F/1200 psi/24 hrs), % 4-8<br>23 °C/13,800 kPa/24 hrs (73 °F/2000 psi/24 hrs), % 15 max. |
| D 570          | Water Absorption, % 0.01 max.<br>Static Coef. of Friction<br>at 3450 kPa (500 psi) bearing pressure<br>on stainless steel, max 0.07  |
| D 429, B       | Adhesion to Steel<br>Peel Strength, N/mm (lb/in.) 4.4 (25)   |

(c) Stainless Steel Sheets. The stainless steel sheets shall be of the thickness specified and shall conform to ASTM A 240, Type 304. The sliding surface shall have a Type 2B finish or smoother as per the American Society of Metals.

(d) Structural Steel. Structural steel components shall be according to the following.

(1) Structural Steel Bearing Plates. The structural steel bearing plates shall conform to the requirements of AASHTO M 270M Grade 250 (M 270, Grade 36).

(2) Internal Steel Laminates. The internal steel laminates for the laminated elastomeric bearings shall be rolled mild steel sheets conforming to AISI 1015 - 1025, inclusive, ASTM A 1008 (A 1008M) or ASTM A 1011 (A 1011M) for less than 5 mm (3/16 in.) thick sheets, or AASHTO M 270M, Grade 250 (M 270, Grade 36) or ASTM A 283M (A 283) Grade D for 5 mm (3/16 in.) and thicker sheets.

(3) Shear Restrictor Pin. The shear restrictor pin, when required, shall be press fit into the bearing plate and shall be alloy steel, quenched, and tempered to a minimum yield strength 1,450,000 kPa (210,000 psi) or RC hardness of 50 to 55.

(4) Threaded Stud. The threaded stud, nuts and washers, when required, shall conform to the requirements of ASTM A 449 or A 193-B7 and shall be galvanized according to Article 1006.08 of the Standard Specifications.

**1083.03 Fabrication Requirements.** Bearings with steel laminates shall be cast as a unit in a mold and bonded and vulcanized under heat and pressure. The molds shall have standard shop practice mold finish. The internal steel laminates shall be blast cleaned to a condition matching that of SSPC-Vis 1-01, Pictorial Standard SP6, and additionally cleaned of any oil or grease before bonding. External load plates shall be protected from rusting by the manufacturer, and shall be hot bonded to the bearing during vulcanization. The bond of steel

components to and within the elastomeric pads shall be continuous throughout the plan area with no voids or air spaces greater than 2.5 mm (0.10 in.) within the bonding material. Bearings with steel laminates which are designed to act as a single unit with a given shape factor must be manufactured as a single unit. Corners and edges may be rounded with a radius at the corners not exceeding 10 mm (3/8 in.) and a radius at the edges not exceeding 6 mm (1/4 in.).

Bonding of TFE sheets shall be done as noted on the plans. No rubber flash will be permitted on the edges of TFE bearing surfaces. All burrs or raised edges along the perimeter of the TFE surface shall be removed before shipment.

All dimension tolerances shall be according to the following.

| Dimensions   | Tolerances  |              |
|--|---|--------------|
|  | mm  | (in.)        |
| Overall vertical dimensions:   |   |              |
| Design thickness; 32 mm (1 1/4 in.) or less  | -0, + 3   | (-0, + 1/8)  |
| Design thickness; over 32 mm (1 1/4 in.)   | -0, + 6   | (-0, + 1/4)  |
| Overall horizontal dimensions:   |   |              |
| For measurements 914 mm (36 in.) and less  | -0, + 6   | (-0, + 1/4)  |
| For measurements over 914 mm (36 in.)  | -0, + 12  | (-0, + 1/2)  |
| Thickness of individual layers of elastomer at any point within the bearing:   | ± 20 % of design value but no more than ± 3 mm (1/8 in.)    |              |
| Variation from a plane parallel to the theoretical surface:<br>(as determined by measurements at the edge of the bearings) |   |              |
| Top  | Slope relative to the bottom of no more than 0.005 radians. |              |
| Sides  | 6   | (1/4)        |
| Position of exposed connection members:  | ± 3   | (± 1/8)      |
| Edge cover of embedded steel laminates, restraining devices, holes and slots:  | + 3 min.  | (+ 1/8 min.) |
|  | + 6 max.  | (+ 1/4 max.) |
| Size of holes, slots, or inserts:  | ± 3   | (± 1/8)      |
| Position of holes, slots, or inserts:  | ± 3   | (± 1/8)      |

Structural steel bearing plates shall be fabricated according to Article 505.04 of the Standard Specifications. Prior to shipment of the bearing assemblies, the exposed edges and other exposed portions of the structural steel bearing plates shall be cleaned and painted in accordance with Articles 506.03 and 506.04 of the Standard Specifications. Painting shall be with the zinc-silicate primer according to Article 1008.22 of the Standard Specifications. During the cleaning and painting, the stainless steel and TFE sheet sliding surfaces and the elastomer shall be protected from abrasion and paint.

**1083.04 Testing and Acceptance.** The rubber laminates shall be of uniform integral units, capable of being separated by mechanical means into separate, well-defined elastomeric layers. The ultimate breakdown limit of the elastomeric bearing under compressive loading shall be not less than 13,800 kPa (2000 psi).

The bearing manufacturer shall load test each completed steel laminated elastomeric bearing pad assembly prior to shipment. The bearings shall be loaded to 10,300 kPa (1500 psi) and under this loading shall exhibit relatively uniform bulging of the rubber layers on all sides and shall show no bond loss or edge splitting. Bearing assemblies under this loading showing nonuniform bulging from one side of the pad to the other, nonuniform bulging along any vertical face of a pad, bulging extending across the specified location of one or more of the internal steel laminates or edge splitting shall be replaced. Nonuniform bulging from one side of the pad to the other may be an indication of lateral misalignment of the internal steel laminates and would not be cause for replacement if probing shows that the edge cover of the steel laminates are within the specified tolerances. Nonuniform bulging along any vertical face of the pad may be an indication of vertical misalignment of the steel laminates and would not be cause for replacement if measurement of the bases of the nonuniform bulges show that the thickness of the elastomeric layers are within the specified  $\pm 20$  percent tolerance. Bulging across the specified location of one or more steel laminates indicates missing steel laminates or lack of bond and pads exhibiting these characteristics shall always be replaced.

The Contractor shall furnish certified copies of the bearing manufacturer's test reports on the physical properties of the component materials for the bearings to be furnished and a certification by the bearing manufacturer that the bearings furnished have been load tested and conform to all requirements.

When directed by the Engineer, the Contractor shall furnish random samples of component materials used in the bearings for testing. In addition, when requested in writing by the Engineer, the Contractor shall furnish an additional project bearing assembly to the Department for testing. When the additional bearing assembly is requested, the Engineer retains the right to select the bearing assembly for testing at random from the project lot. The Contractor will be paid for the additional bearing assembly as specified in Article 503.22 of the Standard Specifications. If the bearing assembly tested is found to be unacceptable, two additional bearing assemblies will be tested. If both are acceptable, the lot will be accepted. If either of the two additional bearing assemblies are unacceptable, the lot will be rejected. The Contractor shall have a new lot produced, including one additional test bearing. No payment will be made for the original failed bearing assembly or any subsequent test assemblies.”

80144

#### **EPOXY COATING ON REINFORCEMENT (BDE)**

Effective: April 1, 1997

Revised: January 1, 2003

For work outside the limits of bridge approach pavement, all references to epoxy coating in the Highway Standards and Standard Specifications for reinforcement, tie bars and chair supports will not apply for pavement, shoulders, curb, gutter, combination curb and gutter and median.

31578

**EPOXY PAVEMENT MARKING (BDE)**

Effective: January 1, 2001

Revised: August 1, 2003

Revise Article 1095.04(b) of the Standard Specifications to read:

“(b) The Epoxide Value (WPE) of Component A shall be tested according to ASTM D 1652 on a pigment free basis. The WPE shall not vary more than plus or minus 50 units of the qualification samples.”

Revise Article 1095.04(c) of the Standard Specifications to read:

“(c) The Total Amine Value of Component B shall be tested according to ASTM D 2074. The Total Amine Value shall not vary more than plus or minus 50 units of the qualification samples.”

Revise Article 1095.04(g) of the Standard Specifications to read:

“(g) The epoxy pavement marking material, when mixed in the proper mix ratio and applied at 0.35 mm to 0.41 mm (14 to 16 mils) wet film thickness and with the proper saturation of glass spheres, shall exhibit a dry no pick-up time of twenty minutes or less when tested according to ASTM D 711.”

Revise Article 1095.04(m) of the Standard Specifications to read:

“(m) The glass beads meet the requirements of Article 1095.07 and the following:

- (1) The first drop glass beads shall be tested by the standard visual method of large glass spheres adopted by the Department. The beads shall have a silane coating and meet the following sieve requirements.

| Sieve Size | U.S. Standard Sieve Number | % Passing (by weight) |
|------------|----------------------------|-----------------------|
| 1.70 mm    | 12                         | 95-100                |
| 1.40 mm    | 14                         | 75-95                 |
| 1.18 mm    | 16                         | 10-47                 |
| 1.00 mm    | 18                         | 0-7                   |
| 850 µm     | 20                         | 0-5                   |

- (2) The second drop glass beads shall be Type B.”

Revise the second sentence of the first paragraph of Article 1095.04(n) of the Standard Specifications to read:



“Subject the coated panel for 75 hours to accelerated weathering using the light and water exposure apparatus (fluorescent UV – condensation type) as specified in ASTM G 53 (equipped with UVB-313 lamps).”

80041

**EROSION AND SEDIMENT CONTROL DEFICIENCY DEDUCTION (BDE)**

Effective: August 1, 2001

Revised: November 1, 2001

When the Engineer is notified or determines an erosion and/or sediment control deficiency(s) exists, he/she will direct the Contractor in writing to correct the deficiency. The Contractor shall then correct the deficiency within 24 hours. The deficiency may be any lack of repair, maintenance, or implementation of erosion and/or sediment control devices included in the contract, or any failure to comply with the conditions of the National Pollutant Discharge Elimination System (NPDES) Storm Water Permit for Construction Site Activities.

If the Contractor fails to correct the deficiency(s) within 24 hours, a daily monetary deduction will be imposed for each calendar day or fraction thereof the deficiency exists. The time period will begin with the initial written notification to the Contractor and end with the Engineer's acceptance of the corrected work. The per calendar day deduction will be either \$1000.00 or 0.05 percent of the awarded contract value, whichever is greater.

If the Contractor fails to respond, the Engineer may correct the deficiencies and deduct the cost from monies due or which may become due the Contractor. This corrective action shall in no way relieve the Contractor of his/her contractual requirements or responsibilities.

80055

**FLAGGER VESTS (BDE)**

Effective: April 1, 2003

Revised: January 1, 2006

Revise the first sentence of Article 701.04(c)(1) of the Standard Specifications to read:

“The flagger shall be stationed to the satisfaction of the Engineer and be equipped with a fluorescent orange, fluorescent yellow/green or a combination of fluorescent orange and fluorescent yellow/green vest meeting the requirements of the American National Standards Institute specification ANSI/ISEA 107-2004 for Conspicuity Class 2 garments and approved flagger traffic control signs conforming to Standard 702001 and Article 702.05(e).”

Revise Article 701.04(c)(6) of the Standard Specifications to read:

“(6) Nighttime Flagging. Flaggers shall be illuminated by an overhead light source providing a minimum vertical illuminance of 108 lux (10 fc) measured 300 mm (1 ft) out from the flagger’s chest. The bottom of any luminaire shall be a minimum of 3 m (10 ft) above the pavement. Luminaire(s) shall be shielded to minimize glare to approaching traffic and trespass light to adjoining properties.

The flagger vest shall be a fluorescent orange or fluorescent orange and fluorescent yellow/green vest meeting the requirements of the American National Standards Institute specification ANSI/ISEA 107-1999 for Conspicuity Class 3 garments.”

80101

**FREEZE-THAW RATING (BDE)**

Effective: November 1, 2002

Revise the first sentence of Article 1004.02(f) of the Standard Specifications to read:

“When coarse aggregate is used to produce portland cement concrete for base course, base course widening, pavement, driveway pavement, sidewalk, shoulders, curb, gutter, combination curb and gutter, median, paved ditch or their repair using concrete, the gradation permitted will be determined from the results of the Department’s Freeze-Thaw Test.”

80079

**FURNISHED EXCAVATION (BDE)**

Effective: August 1, 2002

Revised: November 1, 2004

Revise Article 204.01 of the Standard Specifications to read:

“**Description.** Borrow excavation and furnished excavation shall consist of excavating suitable materials obtained from locations approved by the Engineer and transporting the materials to various locations throughout the limits of the contract.”

Revise Article 204.07(b) of the Standard Specifications to read:

“(b) Measured Quantities. Furnished excavation will be computed for payment in cubic meters (cubic yards) as follows:

Furnished Excavation = Embankment - [Suitable Excavation x (1 - Shrinkage Factor)]

Where:

Embankment = the volume of fill in its final position computed by the method of average end areas and based upon the existing ground line as shown on the plans except as noted in (1) and (2) below;

Suitable Excavation = earth excavation, rock excavation, and other on-site excavation suitable for use in embankments as shown in the Earthwork Schedule on the plans;

Shrinkage Factor = 0.25 unless otherwise shown on the plans.

(1) If the Contractor so requests, the Engineer will reestablish the existing ground line after the clearing and tree removal have been performed according to Section 201 and the top 150 mm (6 in.) of the existing ground surface has been disked and compacted to the satisfaction of the Engineer.

(2) If settlement platforms are erected, the Engineer will reestablish the existing ground line after the embankment is complete as specified in Article 204.07(a)(2).

Furnished excavation placed in excess of that required for the execution of the contract will not be measured for payment.”

Add the following paragraph to the end of Article 204.07 of the Standard Specifications:

“The quantity for furnished excavation will not be recalculated when surplus, suitable materials are utilized in embankments according to Article 202.03.”

80072

**HAND VIBRATOR (BDE)**

Effective: November 1, 2003

Add the following paragraph to Article 1103.17(a) of the Standard Specifications:

“The vibrator shall have a non-metallic head for areas containing epoxy coated reinforcement. The head shall be coated by the manufacturer. The hardness of the non-metallic head shall be less than the epoxy coated reinforcement, resulting in no damage to the epoxy coating. Slip-on covers will not be allowed.”

80054

**IMPACT ATTENUATORS, TEMPORARY (BDE)**

Effective: November 1, 2003

Revised: April 1, 2004

Description. This work shall consist of furnishing, installing, maintaining, and removing temporary impact attenuators of the category and test level specified.

Materials. Materials shall meet the requirements of the impact attenuator manufacturer and the following:

| Item   | Article/Section           |
|--|---------------------------|
| (a) Fine Aggregate (Note 1).....                               | 1003.01                   |
| (b) Steel Posts, Structural Shapes, and Plates .....           | 1006.04                   |
| (c) Rail Elements, End Section Plates, and Splice Plates ..... | 1006.25                   |
| (d) Bolts, Nuts, Washers and Hardware .....                    | 1006.25                   |
| (e) Hollow Structural Tubing .....                             | 1006.27(b)                |
| (f) Wood Posts and Wood Blockouts.....                         | 1007.01, 1007.02, 1007.06 |
| (g) Preservative Treatment.....                                | 1007.12                   |
| (h) Rapid Set Mortar (Note 2)                                  |                           |

Note 1. Fine aggregate shall be FA-1 or FA-2, Class A quality. The sand shall be unbagged and shall have a maximum moisture content of five percent.

Note 2. Rapid set mortar shall be obtained from the Department's approved list of Packaged, Dry, Rapid Hardening Cementitious Materials for Concrete Repairs. For a rapid set mortar mixture, one part packaged rapid set cement shall be combined with two parts fine aggregate, by volume or a packaged rapid set mortar shall be used. Mixing of the rapid set mortar shall be according to the manufacturer's instructions.

### CONSTRUCTION REQUIREMENTS

General. Impact Attenuators shall meet the testing criteria contained in National Cooperative Highway Research Program (NCHRP) Report 350 for the test level specified and shall be on the Department's approved list.

Installation. Regrading of slopes or approaches for the installation shall be as shown on the plans.

Attenuator bases, when required by the manufacturer, shall be constructed on a prepared subgrade according to the manufacturer's specifications. The surface of the base shall be slightly sloped or crowned to facilitate drainage.

Impact attenuators shall be installed according to the manufacturer's specifications and include all necessary transitions between the impact attenuator and the item to which it is attached.

When water filled attenuators are used between November 1 and April 15, they shall contain anti-freeze according to the manufacturer's recommendations.

Markings. Sand module impact attenuators shall be striped with alternating reflectorized Type AA or Type AP fluorescent orange and reflectorized white horizontal, circumferential stripes. There shall be at least two of each stripe on each module.

Other types of impact attenuators shall have a terminal marker applied to their nose and reflectors along their sides.

Maintenance. All maintenance of the impact attenuators shall be the responsibility of the Contractor until removal is directed by the Engineer.

Relocate. When relocation of temporary impact attenuators is specified, they shall be removed, relocated and reinstalled at the new location. The reinstallation requirements shall be the same as those for a new installation.

Removal. When the Engineer determines the temporary impact attenuators are no longer required, the installation shall be dismantled with all hardware becoming the property of the Contractor.

Surplus material shall be disposed of according to Article 202.03. Anti-freeze, when present, shall be disposed of/recycled according to local ordinances.

When impact attenuators have been anchored to the pavement, the anchor holes shall be repaired with rapid set mortar. Only enough water to permit placement and consolidation by rodding shall be used and the material shall be struck-off flush.

Method of Measurement. This work will be measured for payment as each, where each is defined as one complete installation.

Basis of Payment. This work will be paid for at the contract unit price per each for IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW); IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, WIDE); IMPACT ATTENUATORS, TEMPORARY (SEVERE USE, NARROW); IMPACT ATTENUATORS, TEMPORARY (SEVERE USE, WIDE); or IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE) of the test level specified.

Relocation of the devices will be paid for at the contract unit price per each for IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE); IMPACT ATTENUATORS, RELOCATE (SEVERE USE); or IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE); of the test level specified.

Regrading of slopes or approaches will be paid for according to Section 202 and/or Section 204 of the Standard Specifications.

80110

### **LIME GRADATION REQUIREMENTS (BDE)**

Effective: November 1, 2002

Revise Articles 1012.03(e) and 1012.04(e) of the Standard Specifications to modify the maximum percent retained on the 150  $\mu\text{m}$  (No. 100) sieve from "25" to "30".

80081

**MINIMUM LANE WIDTH WITH LANE CLOSURE (BDE)**

Effective: January 1, 2005

Add the following paragraph after the eighth paragraph of Article 701.04(a) of the Standard Specifications.

“The minimum lane width adjacent to a closed lane during paving, patching, and other moving operations on freeways and expressways shall be a minimum of 3 m (10 ft). The 3 m (10 ft) shall be clear, unobstructed, and free of channelizing devices or other obstacles.”

80137

**MULCHING SEEDED AREAS (BDE)**

Effective: January 1, 2005

Delete Article 251.02(a) of the Standard Specifications.

Add the following to Article 251.02 of the Standard Specifications:

“(h) Compost ..... 1081.05(b)”

Delete Article 251.03(b)(1) of the Standard Specifications.

Add the following to Article 251.03 of the Standard Specifications:

“(d) Method 4. This method shall consist of applying compost combined with a performance additive designed to bind/stabilize the compost. The compost/performance additive mixture shall be applied to the surface of the slope using a pneumatic blower at a depth of 50 mm (2 in.).”

Revise the first sentence of the first paragraph of Article 251.06(b) of the Standard Specifications to read:

“Mulch Methods 1, 2, 3, and 4 will be measured for payment in hectares (acres) of surface area mulched.”

Revise Article 251.07 of the Standard Specifications to read:

**“251.07 Basis of Payment.** This work will be paid for at the contract unit price per hectare (acre) for MULCH, METHOD 1; MULCH, METHOD 2; MULCH, METHOD 3; or MULCH, METHOD 4; and at the contract unit price per square meter (square yard) for EROSION CONTROL BLANKET or HEAVY DUTY EROSION CONTROL BLANKET.”

Add the following after the second paragraph of Article 1081.05(b) of the Standard Specifications:

“Chemical Compost Binder. Chemical compost binder shall be a commercially available product specifically recommended by the manufacturer for use as a compost stabilizer.

The compost binder shall be nonstaining and nontoxic to vegetation and the environment. It shall disperse evenly and rapidly and remain in suspension when agitated in water.

Prior to use of the compost binder, the Contractor shall submit a notarized certification by the manufacturer stating that it meets these requirements. Chemical compost binder shall be packaged, stored, and shipped according to the manufacturer's recommendations with the net quantity plainly shown on each package or container.”

80138

### **PARTIAL PAYMENTS (BDE)**

Effective: September 1, 2003

Revise Article 109.07 of the Standard Specifications to read:

“**109.07 Partial Payments.** Partial payments will be made as follows:

- (a) Progress Payments. At least once each month, the Engineer will make a written estimate of the amount of work performed in accordance with the contract, and the value thereof at the contract unit prices. The amount of the estimate approved as due for payment will be vouchered by the Department and presented to the State Comptroller for payment. No amount less than \$1000.00 will be approved for payment other than the final payment.

The failure to perform any requirement, obligation, or term of the contract by the Contractor shall be reason for withholding any progress payments until the Department determines that compliance has been achieved. Furthermore, progress payments may be reduced by liens filed pursuant to Section 23(c) of the Mechanics Lien Act, 770 ILCS 60/23(c).

- (b) Material Allowances. At the discretion of the Department, payment may be made for materials, prior to their use in the work, when satisfactory evidence is presented by the Contractor. Satisfactory evidence includes justification for the allowance (to expedite the work, meet project schedules, regional or national material shortages, etc.), documentation of material and transportation costs, and evidence that such material is properly stored on the project or at a secure location acceptable and accessible to the Department.

Material allowances will be considered only for nonperishable materials when the cost, including transportation, exceeds \$10,000 and such materials are not expected to be utilized within 60 days of the request for the allowance. For contracts valued under \$500,000, the minimum \$10,000 requirement may be met by combining the principal (material) product of no more than two contract items. An exception to this two item limitation may be considered for any contract regardless of value for items in which material (products) are similar except for type and/or size.

Material allowances shall not exceed the value of the contract items in which used and shall not include the cost of installation or related markups. Amounts paid by the Department for material allowances will be deducted from estimates due the Contractor as the material is used. Two-sided copies of the Contractor's cancelled checks for materials and transportation must be furnished to the Department within 60 days of payment of the allowances or the amounts will be reclaimed by the Department."

80116

#### **PAVEMENT THICKNESS DETERMINATION FOR PAYMENT (BDE)**

Effective: April 1, 1999

Revised: January 1, 2004

Description. This work shall consist of determining pavement thickness for payment for full depth bituminous concrete and all pcc pavements. Pavement pay items that individually contain at least 840 sq m (1000 sq yd) of contiguous pavement will be subject to this Special Provision with the following exclusions: temporary pavements; variable width pavement; radius returns and side streets less than 125 m (400 ft) in length; and turn lanes of constant width less than 125 m (400 ft) in length. The areas of pavement excluded from the pay adjustment as described in this Special Provision will be cored according to Article 407.10 of the Standard Specifications. Temporary pavements are defined as pavements constructed and removed under this contract.

Materials. Rapid set materials shall be obtained from the Department's approved list of Packaged, Dry, Rapid Hardening Cementitious Materials For Concrete Repairs. Coarse aggregate may be added to the mortar if allowed by the manufacturer's instructions on the package. Mixing shall be according to the manufacture's recommendations.

Equipment. Cores shall be taken utilizing an approved coring machine. The cores shall have a diameter of 50 mm (2 in.). The cores shall be measured utilizing an approved measuring device.

#### **CONSTRUCTION REQUIREMENTS**

Tolerance in Thickness. Determination of the pavement thickness shall be performed after the pavement surface tests and all corrective grinding are complete according to Article 407.09 of the Standard Specifications. Adjustments made in the contract unit price for pavement thickness will be in addition to and independent of those made for the Profile Index.



The pavement will be divided into approximately equal lots of not more than 1500 m (5000 ft) in length. When the length of a continuous strip of pavement is less than 1500 m (5000 ft), these short lengths of pavement, ramps, turn lanes, and other short sections of continuous pavement shall be grouped together to form lots of approximately 1500 m (5000 ft) in length. Short segments between structures will be measured continuously with the structure segments omitted. Each lot will be subdivided into ten equal sublots. The width of a subplot and lot will be the width from the pavement edge to the adjacent lane line, from one lane line to the next, or between pavement edges for single-lane pavements.

Fifty millimeter (Two inch) cores shall be taken from the pavement by the Contractor at random locations selected by the Engineer. When computing the thickness of a lot, one core will be taken per subplot. Core locations will be specified by the Engineer prior to beginning the coring operations.

The Contractor and the Engineer shall witness the coring operations, the measurement, and recording of the cores. Core measurements will be determined immediately upon removal from the core bit and prior to moving to the next core location. Upon concurrence of the length, the core samples may be discarded.

Patching Holes. Upon completion of coring, all core holes shall be filled with a rapid set mortar or concrete. Only enough water to permit placement and consolidation by rodding shall be used, and the material shall be struck-off flush with the adjacent pavement.

For a rapid set mortar mixture, one part packaged rapid set cement shall be combined with two parts fine aggregate, by volume; or a packaged rapid set mortar shall be used. For a rapid set concrete mixture, a packaged rapid set mortar shall be combined with coarse aggregate according to the manufacturer's instructions or a packaged rapid set concrete shall be used. Mixing of a rapid set mortar or concrete shall be according to the manufacturer's instructions.

Deficient Sublot. When the thickness of the core in a subplot is deficient by more than ten percent of plan thickness, the Contractor will have the option of taking three additional cores selected at random by the Engineer within the same subplot at the Contractor's expense. The thickness of the additional three cores will be averaged with the original core thickness. When the average thickness shows the subplot to be deficient by ten percent or less, no additional action is necessary. If the Contractor chooses not to take additional cores, the pavement in the subplot shall be removed and replaced at the Contractor's expense. When additional cores are taken and the average thickness of the additional cores show the subplot to be deficient by more than ten percent, the pavement in that subplot shall be removed and replaced at the Contractor's expense. When requested in writing by the Contractor, the Engineer, at his/her option, may permit in writing such thin pavement to remain in place. For Bituminous Concrete Pavement (Full Depth) allowed to remain in place, additional lift(s) may be placed, at the Contractor's expense, to bring the deficient pavement to plan thickness when the Engineer determines grade control conditions will permit such lift(s). The material thickness(es), areas to be overlaid, and method of placement used for additional lift(s) will be approved by the Engineer. When the thin pavement is removed and replaced or additional lifts are placed, the replacement pavement will be retested for thickness at the Contractor's expense. When the thin pavement is left in place and no additional lift(s) are placed, no payment will be made for the deficient pavement subplot. The thickness of the original core taken in the subplot will be used in determining the payment for the entire lot and no adjustment to the pay factor will be made for any corrective action taken.

Deficient Lot. After analyzing the cores, the Percent Within Limits will be calculated. A lot of pavement represented by the Percent Within Limits (PWL) of 60 percent or less, shall be removed and replaced at the Contractor's expense. When requested in writing by the Contractor, the Engineer, at his/her option, may permit in writing such pavement to remain in place. For Bituminous Concrete Pavement (Full Depth), allowed to remain in place, additional lift(s) may be placed, at the Contractor's expense, to bring the deficient pavement to plan thickness when the Engineer determines grade control conditions will permit such lift(s). The material, thickness(es), areas to be overlaid and method of placement used for the additional lift(s) will be approved by the Engineer. After either corrective action, the Contractor shall core the lot according to the "Coring Procedures" at no additional cost to the Department. The PWL will then be recalculated for the lot, however, the pay factor for the lot will be a maximum of 100 percent. When requested in writing by the Contractor, the Engineer, at his/her option, may permit in writing, the lot to remain in place. When the lot is left in place and no additional lifts are placed the pay factor for the lot will be based on the calculated PWL.

Right of Discovery. When the Engineer has reason to believe the random core selection process will not accurately represent the true conditions of the work, he/she may order cores in addition to those specified. The additional cores shall be taken at specific locations determined by the Engineer. The Engineer will provide notice to the Contractor containing an explanation of the reasons for his/her action. These additional cores and locations will be determined prior to commencement of coring operations. When the additional cores show the pavement to be deficient by more than ten percent, additional cores shall be taken at locations determined by the Engineer to determine the limits of the deficient pavement area. The deficient pavement area will be defined as the area between two acceptable cores. An acceptable core is a core with a thickness of 90 percent or more of plan thickness. The defined pavement area shall be removed and replaced at the Contractor's expense. When requested by the Contractor, the Engineer, at his/her option, may permit in writing such thin pavement to remain in place. On Bituminous Concrete Pavement (Full Depth) allowed to remain in place, additional lift(s) may be placed to bring the deficient pavement to plan thickness when the Engineer determines that grade control conditions will permit such lift(s). The material, thickness(es), areas to be overlaid and method of placement for the additional lift(s) will be approved by the Engineer. When the thin pavement is removed and replaced or additional lifts are placed, the replacement pavement will be retested for thickness at the Contractor's expense. When the thin pavement is left in place and no additional lift(s) are placed, no payment will be made for the deficient pavement. When the additional cores show the pavement to be deficient by ten percent or less the additional cores will be paid for according to Article 109.04. When the additional cores show the pavement to be deficient by more than ten percent the additional cores taken in the deficient area shall be at the Contractor's expense.

Profile Index Adjustment. After any section of pavement is removed and replaced or any additional lifts are added, the corrected areas shall be tested for pavement smoothness and any necessary Profile Index adjustments and/or corrections will be made based on these final profile readings. Such surface testing shall be performed at the Contractor's expense.

Core Analysis. Cores will be analyzed according to the following:

(a) Definition:

- $x_i$  = Individual values (core lengths) under consideration
- $n$  = Number of individual values under consideration  
(10 per lot)
- $\bar{x}$  = Average of the values under consideration
- LSL = Lower Specification Limit (LSL = 0.98 plan thickness for pavement)
- $Q_L$  = Lower Quality Index
- $S$  = Sample Standard Deviation
- PWL = Percent Within Limits

Determine  $\bar{x}$  for the lot to the nearest two decimal places.

Compute the sample standard deviation to the nearest three decimal places using:

$$S = \sqrt{\frac{\sum (x_i - \bar{x})^2}{n-1}} \quad \text{where} \quad \sum (x_i - \bar{x})^2 = (x_1 - \bar{x})^2 + (x_2 - \bar{x})^2 + \dots + (x_{10} - \bar{x})^2$$

Determine the Lower Quality Index to the nearest two decimal places using:

$$Q_L = \frac{(\bar{x} - LSL)}{S}$$

Determine the percentage that will fall above the Lower Specification Limit (LSL) by going to the attached Table and utilizing calculated  $Q_L$ . Read the appropriate PWL value from the Table. For  $Q_L$  values less than zero the value shown in the table must be subtracted from 100 to obtain PWL.

Pay Adjustment. The following pay adjustment equation will be used to determine (to the nearest two decimal places) the pay factor for each lot.

$$\text{Pay Factor (PF) in percent} = 55 + 0.5 (\text{PWL})$$

If  $\bar{x}$  for a lot is less than the plan thickness, the maximum pay factor for that lot will be 100 percent.

Total Payment. The payment will be based on the appropriate pay items in Sections 407, 420, and 421. The final payment will be adjusted according to the following equation:

$$\text{Total Payment} = \text{TPF}[\text{CUP} (\text{TOTPAVT} - \text{DEFFPAVT})]$$

TPF = Total Pay Factor  
CUP = Contract Unit Price  
TOTPAVT = Area of Pavement Subject to Coring  
DEFPAVT = Area of Deficient Pavement

The TPF for the entire pavement will be the average of the PF for all the lots, however, not more than 102 percent of plan quantity will be paid.

Deficient pavement is defined as an area of pavement represented by a subplot deficient by more than 10 percent which is left in place with no additional thickness added.

All work involved in determining the total payment will be included in the contract unit prices of the pay items involved.

| Percent Within Limits            |                             |                                  |                             |                                  |                             |                                  |                             |
|----------------------------------|-----------------------------|----------------------------------|-----------------------------|----------------------------------|-----------------------------|----------------------------------|-----------------------------|
| Quality Index (Q <sub>L</sub> )* | Percent Within Limits (PWL) | Quality Index (Q <sub>L</sub> )* | Percent Within Limits (PWL) | Quality Index (Q <sub>L</sub> )* | Percent Within Limits (PWL) | Quality Index (Q <sub>L</sub> )* | Percent Within Limits (PWL) |
| 0.00                             | 50.00                       | 0.40                             | 65.07                       | 0.80                             | 78.43                       | 1.20                             | 88.76                       |
| 0.01                             | 50.38                       | 0.41                             | 65.43                       | 0.81                             | 78.72                       | 1.21                             | 88.97                       |
| 0.02                             | 50.77                       | 0.42                             | 65.79                       | 0.82                             | 79.02                       | 1.22                             | 89.17                       |
| 0.03                             | 51.15                       | 0.43                             | 66.15                       | 0.83                             | 79.31                       | 1.23                             | 89.38                       |
| 0.04                             | 51.54                       | 0.44                             | 66.51                       | 0.84                             | 79.61                       | 1.24                             | 89.58                       |
| 0.05                             | 51.92                       | 0.45                             | 66.87                       | 0.85                             | 79.90                       | 1.25                             | 89.79                       |
| 0.06                             | 52.30                       | 0.46                             | 67.22                       | 0.86                             | 80.19                       | 1.26                             | 89.99                       |
| 0.07                             | 52.69                       | 0.47                             | 67.57                       | 0.87                             | 80.47                       | 1.27                             | 90.19                       |
| 0.08                             | 53.07                       | 0.48                             | 67.93                       | 0.88                             | 80.76                       | 1.28                             | 90.38                       |
| 0.09                             | 53.46                       | 0.49                             | 68.28                       | 0.89                             | 81.04                       | 1.29                             | 90.58                       |
| 0.10                             | 53.84                       | 0.50                             | 68.63                       | 0.90                             | 81.33                       | 1.30                             | 90.78                       |
| 0.11                             | 54.22                       | 0.51                             | 68.98                       | 0.91                             | 81.61                       | 1.31                             | 90.96                       |
| 0.12                             | 54.60                       | 0.52                             | 69.32                       | 0.92                             | 81.88                       | 1.32                             | 91.15                       |
| 0.13                             | 54.99                       | 0.53                             | 69.67                       | 0.93                             | 82.16                       | 1.33                             | 91.33                       |
| 0.14                             | 55.37                       | 0.54                             | 70.01                       | 0.94                             | 82.43                       | 1.34                             | 91.52                       |
| 0.15                             | 55.75                       | 0.55                             | 70.36                       | 0.95                             | 82.71                       | 1.35                             | 91.70                       |
| 0.16                             | 56.13                       | 0.56                             | 70.70                       | 0.96                             | 82.97                       | 1.36                             | 91.87                       |
| 0.17                             | 56.51                       | 0.57                             | 71.04                       | 0.97                             | 83.24                       | 1.37                             | 92.04                       |
| 0.18                             | 56.89                       | 0.58                             | 71.38                       | 0.98                             | 83.50                       | 1.38                             | 92.22                       |
| 0.19                             | 57.27                       | 0.59                             | 71.72                       | 0.99                             | 83.77                       | 1.39                             | 92.39                       |
| 0.20                             | 57.65                       | 0.60                             | 72.06                       | 1.00                             | 84.03                       | 1.40                             | 92.56                       |
| 0.21                             | 58.03                       | 0.61                             | 72.39                       | 1.01                             | 84.28                       | 1.41                             | 92.72                       |
| 0.22                             | 58.40                       | 0.62                             | 72.72                       | 1.02                             | 84.53                       | 1.42                             | 92.88                       |
| 0.23                             | 58.78                       | 0.63                             | 73.06                       | 1.03                             | 84.79                       | 1.43                             | 93.05                       |
| 0.24                             | 59.15                       | 0.64                             | 73.39                       | 1.04                             | 85.04                       | 1.44                             | 93.21                       |
| 0.25                             | 59.53                       | 0.65                             | 73.72                       | 1.05                             | 85.29                       | 1.45                             | 93.37                       |
| 0.26                             | 59.90                       | 0.66                             | 74.04                       | 1.06                             | 85.53                       | 1.46                             | 93.52                       |
| 0.27                             | 60.28                       | 0.67                             | 74.36                       | 1.07                             | 85.77                       | 1.47                             | 93.67                       |
| 0.28                             | 60.65                       | 0.68                             | 74.69                       | 1.08                             | 86.02                       | 1.48                             | 93.83                       |
| 0.29                             | 61.03                       | 0.69                             | 75.01                       | 1.09                             | 86.26                       | 1.49                             | 93.98                       |
| 0.30                             | 61.40                       | 0.70                             | 75.33                       | 1.10                             | 86.50                       | 1.50                             | 94.13                       |
| 0.31                             | 61.77                       | 0.71                             | 75.64                       | 1.11                             | 86.73                       | 1.51                             | 94.27                       |
| 0.32                             | 62.14                       | 0.72                             | 75.96                       | 1.12                             | 86.96                       | 1.52                             | 94.41                       |
| 0.33                             | 62.51                       | 0.73                             | 76.27                       | 1.13                             | 87.20                       | 1.53                             | 94.54                       |
| 0.34                             | 62.88                       | 0.74                             | 76.59                       | 1.14                             | 87.43                       | 1.54                             | 94.68                       |
| 0.35                             | 63.25                       | 0.75                             | 76.90                       | 1.15                             | 87.66                       | 1.55                             | 94.82                       |
| 0.36                             | 63.61                       | 0.76                             | 77.21                       | 1.16                             | 87.88                       | 1.56                             | 94.95                       |
| 0.37                             | 63.98                       | 0.77                             | 77.51                       | 1.17                             | 88.10                       | 1.57                             | 95.08                       |
| 0.38                             | 64.34                       | 0.78                             | 77.82                       | 1.18                             | 88.32                       | 1.58                             | 95.20                       |
| 0.39                             | 64.71                       | 0.79                             | 78.12                       | 1.19                             | 88.54                       | 1.59                             | 95.33                       |

\*For Q<sub>L</sub> values less than zero, subtract the table value from 100 to obtain PWL

| Percent Within Limits (continued) |                             |                                  |                             |                                  |                             |
|-----------------------------------|-----------------------------|----------------------------------|-----------------------------|----------------------------------|-----------------------------|
| Quality Index (Q <sub>L</sub> )*  | Percent Within Limits (PWL) | Quality Index (Q <sub>L</sub> )* | Percent Within Limits (PWL) | Quality Index (Q <sub>L</sub> )* | Percent Within Limits (PWL) |
| 1.60                              | 95.46                       | 2.00                             | 98.83                       | 2.40                             | 99.89                       |
| 1.61                              | 95.58                       | 2.01                             | 98.88                       | 2.41                             | 99.90                       |
| 1.62                              | 95.70                       | 2.02                             | 98.92                       | 2.42                             | 99.91                       |
| 1.63                              | 95.81                       | 2.03                             | 98.97                       | 2.43                             | 99.91                       |
| 1.64                              | 95.93                       | 2.04                             | 99.01                       | 2.44                             | 99.92                       |
| 1.65                              | 96.05                       | 2.05                             | 99.06                       | 2.45                             | 99.93                       |
| 1.66                              | 96.16                       | 2.06                             | 99.10                       | 2.46                             | 99.94                       |
| 1.67                              | 96.27                       | 2.07                             | 99.14                       | 2.47                             | 99.94                       |
| 1.68                              | 96.37                       | 2.08                             | 99.18                       | 2.48                             | 99.95                       |
| 1.69                              | 96.48                       | 2.09                             | 99.22                       | 2.49                             | 99.95                       |
| 1.70                              | 96.59                       | 2.10                             | 99.26                       | 2.50                             | 99.96                       |
| 1.71                              | 96.69                       | 2.11                             | 99.29                       | 2.51                             | 99.96                       |
| 1.72                              | 96.78                       | 2.12                             | 99.32                       | 2.52                             | 99.97                       |
| 1.73                              | 96.88                       | 2.13                             | 99.36                       | 2.53                             | 99.97                       |
| 1.74                              | 96.97                       | 2.14                             | 99.39                       | 2.54                             | 99.98                       |
| 1.75                              | 97.07                       | 2.15                             | 99.42                       | 2.55                             | 99.98                       |
| 1.76                              | 97.16                       | 2.16                             | 99.45                       | 2.56                             | 99.98                       |
| 1.77                              | 97.25                       | 2.17                             | 99.48                       | 2.57                             | 99.98                       |
| 1.78                              | 97.33                       | 2.18                             | 99.50                       | 2.58                             | 99.99                       |
| 1.79                              | 97.42                       | 2.19                             | 99.53                       | 2.59                             | 99.99                       |
| 1.80                              | 97.51                       | 2.20                             | 99.56                       | 2.60                             | 99.99                       |
| 1.81                              | 97.59                       | 2.21                             | 99.58                       | 2.61                             | 99.99                       |
| 1.82                              | 97.67                       | 2.22                             | 99.61                       | 2.62                             | 99.99                       |
| 1.83                              | 97.75                       | 2.23                             | 99.63                       | 2.63                             | 100.00                      |
| 1.84                              | 97.83                       | 2.22                             | 99.66                       | 2.64                             | 100.00                      |
| 1.85                              | 97.91                       | 2.25                             | 99.68                       | ≥ 2.65                           | 100.00                      |
| 1.86                              | 97.98                       | 2.26                             | 99.70                       |                                  |                             |
| 1.87                              | 98.05                       | 2.27                             | 99.72                       |                                  |                             |
| 1.88                              | 98.11                       | 2.28                             | 99.73                       |                                  |                             |
| 1.89                              | 98.18                       | 2.29                             | 99.75                       |                                  |                             |
| 1.90                              | 98.25                       | 2.30                             | 99.77                       |                                  |                             |
| 1.91                              | 98.31                       | 2.31                             | 99.78                       |                                  |                             |
| 1.92                              | 98.37                       | 2.32                             | 99.80                       |                                  |                             |
| 1.93                              | 98.44                       | 2.33                             | 99.81                       |                                  |                             |
| 1.94                              | 98.50                       | 2.34                             | 99.83                       |                                  |                             |
| 1.95                              | 98.56                       | 2.35                             | 99.84                       |                                  |                             |
| 1.96                              | 98.61                       | 2.36                             | 99.85                       |                                  |                             |
| 1.97                              | 98.67                       | 2.37                             | 99.86                       |                                  |                             |
| 1.98                              | 98.72                       | 2.38                             | 99.87                       |                                  |                             |
| 1.99                              | 98.78                       | 2.39                             | 99.88                       |                                  |                             |

\*For Q<sub>L</sub> values less than zero, subtract the table value from 100 to obtain PWL

53600

**PAYMENTS TO SUBCONTRACTORS (BDE)**

Effective: June 1, 2000

Revised: January 1, 2006

Federal regulations found at 49 CFR §26.29 mandate the Department to establish a contract clause to require Contractors to pay subcontractors for satisfactory performance of their subcontracts and to set the time for such payments.

State law also addresses the timing of payments to be made to subcontractors and material suppliers. Section 7 of the Prompt Payment Act, 30 ILCS 540/7, requires that when a Contractor receives any payment from the Department, the Contractor shall make corresponding, proportional payments to each subcontractor and material supplier performing work or supplying material within 15 calendar days after receipt of the Department payment. Section 7 of the Act further provides that interest in the amount of two percent per month, in addition to the payment due, shall be paid to any subcontractor or material supplier by the Contractor if the payment required by the Act is withheld or delayed without reasonable cause. The Act also provides that the time for payment required and the calculation of any interest due applies to transactions between subcontractors and lower-tier subcontractors and material suppliers throughout the contracting chain.

This Special Provision establishes the required federal contract clause, and adopts the 15 calendar day requirement of the State Prompt Payment Act for purposes of compliance with the federal regulation regarding payments to subcontractors. This contract is subject to the following payment obligations.

When progress payments are made to the Contractor according to Article 109.07 of the Standard Specifications, the Contractor shall make a corresponding payment to each subcontractor and material supplier in proportion to the work satisfactorily completed by each subcontractor and for the material supplied to perform any work of the contract. The proportionate amount of partial payment due to each subcontractor and material supplier throughout the contracting chain shall be determined by the quantities measured or otherwise determined as eligible for payment by the Department and included in the progress payment to the Contractor. Subcontractors and material suppliers shall be paid by the Contractor within 15 calendar days after the receipt of payment from the Department. The Contractor shall not hold retainage from the subcontractors. These obligations shall also apply to any payments made by subcontractors and material suppliers to their subcontractors and material suppliers; and to all payments made to lower tier subcontractors and material suppliers throughout the contracting chain. Any payment or portion of a payment subject to this provision may only be withheld from the subcontractor or material supplier to whom it is due for reasonable cause.

This Special Provision does not create any rights in favor of any subcontractor or material supplier against the State or authorize any cause of action against the State on account of any payment, nonpayment, delayed payment, or interest claimed by application of the State Prompt Payment Act. The Department will not approve any delay or postponement of the 15 day requirement except for reasonable cause shown after notice and hearing pursuant to Section 7(b) of the State Prompt Payment Act. State law creates other and additional remedies available to any subcontractor or material supplier, regardless of tier, who has not been paid for

work properly performed or material furnished. These remedies are a lien against public funds set forth in Section 23(c) of the Mechanics Lien Act, 770 ILCS 60/23(c), and a recovery on the Contractor's payment bond according to the Public Construction Bond Act, 30 ILCS 550.

80022

### **PAYROLLS AND PAYROLL RECORDS (BDE)**

Effective: August 10, 2005

FEDERAL AID CONTRACTS. Add the following State of Illinois requirements to the Federal requirements contained in Section V of Form FHWA-1273:

"The payroll records shall include each worker's name, address, telephone number, social security number, classification, rate of pay, number of hours worked each day, starting and ending times of work each day, total hours worked each week, itemized deductions made, and actual wages paid.

The Contractor and each subcontractor shall submit payroll records to the Engineer each week from the start to the completion of their respective work. The submittals shall be on the Department's form SBE 48, or an approved facsimile. When there has been no activity during a work week, a payroll record shall still be submitted with the appropriate box ("No Work", "Suspended", or "Complete") checked on the form."

STATE CONTRACTS. Revise Section IV of Check Sheet #5 of the Recurring Special Provisions to read:

#### **"IV. COMPLIANCE WITH THE PREVAILING WAGE ACT**

1. **Prevailing Wages.** All wages paid by the Contractor and each subcontractor shall be in compliance with The Prevailing Wage Act (820 ILCS 130), as amended, except where a prevailing wage violates a federal law, order, or ruling, the rate conforming to the federal law, order, or ruling shall govern. The Contractor shall be responsible to notify each subcontractor of the wage rates set forth in this contract and any revisions thereto. If the Department of Labor revises the wage rates, the Contractor will not be allowed additional compensation on account of said revisions.
2. **Payroll Records.** The Contractor and each subcontractor shall make and keep, for a period of three years from the date of completion of this contract, records of the wages paid to his/her workers. The payroll records shall include each worker's name, address, telephone number, social security number, classification, rate of pay, number of hours worked each day, starting and ending times of work each day, total hours worked each week, itemized deductions made, and actual wages paid. Upon two business days' notice, these records shall be available, at all reasonable hours at a location within the State, for inspection by the Department or the Department of Labor.



3. Submission of Payroll Records. The Contractor and each subcontractor shall submit payroll records to the Engineer each week from the start to the completion of their respective work. The submittals shall be on the Department's form SBE 48, or an approved facsimile. When there has been no activity during a work week, a payroll record shall still be submitted with the appropriate box ("No Work", "Suspended", or "Complete") checked on the form.

Each submittal shall be accompanied by a statement signed by the Contractor or subcontractor which avers that: (i) such records are true and accurate; (ii) the hourly rate paid to each worker is not less than the general prevailing rate of hourly wages required by the Act; and (iii) the Contractor or subcontractor is aware that filing a payroll record that he/she knows to be false is a Class B misdemeanor.

4. Employee Interviews. The Contractor and each subcontractor shall permit his/her employees to be interviewed on the job, during working hours, by compliance investigators of the Department or the Department of Labor."

80155

#### **PERSONAL PROTECTIVE EQUIPMENT (BDE)**

Effective: July 1, 2004

All personnel, excluding flaggers, working outside of a vehicle (car or truck) within 7.6 m (25 ft) of pavement open to traffic shall wear a fluorescent orange, fluorescent yellow/green or a combination of fluorescent orange and fluorescent yellow/.green vest meeting the requirements of the American National Standards Institute specification ANSI/ISEA 107-1999 for Conspicuity Class 2 garments. Other types of garments may be substituted for the vest as long as the garments have manufacturers tags identifying them as meeting the ANSI Class 2 requirement.

80130

#### **PLANTING WOODY PLANTS (BDE)**

Effective: January 1, 2006

Revise the first and second paragraphs of Article 253.14 of the Standard Specifications to read:

**"253.14 Period of Establishment.** Prior to being accepted, the plants shall endure a period of establishment. This period shall begin in June and end in September of the same year. To qualify for inspection, plants shall have been in place, in a live healthy condition, on or before June 1 of the year of inspection. To be acceptable, plants shall be in a live healthy condition, representative of their species, at the time of inspection in the month of September.

When the planting work is performed by a subcontractor, this delay in inspection and acceptance of plants shall not delay acceptance of the entire project and final payment due if the Contractor requires and receives from the subcontractor a third party performance bond naming the Department as obligee in the full amount of the planting quantities listed in the contract, multiplied by their contract unit prices. The bond shall be executed prior to acceptance and final payment of the non-planting items and shall be in full force and effect until final inspection and acceptance of all plants including replacements. Execution of the third party bond shall be the option of the prime Contractor.”

Revise Article 253.16 of the Standard Specifications to read:

**“253.16 Method of Measurement.** This work will be measured for final payment, in place, after the period of establishment. Trees, shrubs, and vines will be measured as each individual plant. Seedlings will be measured in units of 100 plants.”

Revise Article 253.17 of the Standard Specifications to read:

**“253.17 Basis of Payment.** This work will be paid for at the contract unit price per each for TREES, SHRUBS, and VINES, of the species, root type, and plant size specified; and per unit for SEEDLINGS. Payment will be made according to the following schedule.

(a) Initial Payment. Upon planting, 75 percent of the pay item(s) will be paid.

(b) Final Payment. Upon inspection and acceptance of the plant material, or upon execution of a third party bond, the remaining 25 percent of the pay item(s) will be paid.”

80148

## **PLASTIC BLOCKOUTS FOR GUARDRAIL (BDE)**

Effective: November 1, 2004

Add the following to Article 630.02 of the Standard Specifications:

“(h) Plastic Blockouts (Note 1.)

Note 1. Plastic blockouts, 150 mm (6 in.) deep, may be used in lieu of 150 mm (6 in.) deep wood block-outs for steel plate beam guardrail. The plastic blockouts shall be on the Department’s approved list.”

80134

**PORTABLE CHANGEABLE MESSAGE SIGNS (BDE)**

Effective: November 1, 1993

Revised: April 2, 2004

Description. This work shall consist of furnishing, placing, and maintaining changeable message sign(s) at the location(s) shown on the plans or as directed by the Engineer.

The sign(s) shall be trailer mounted. The message panel shall be at least 2.1 m (7 ft) above the pavement, present a level appearance, and be capable of displaying up to eight characters in each of three lines at a time. Character height shall be 450 mm (18 in.).

The message panel shall be of either a bulb matrix or disc matrix design controlled by an onboard computer capable of storing a minimum of 99 programmed messages for instant recall. The computer shall be capable of being programmed to accept messages created by the operator via an alpha-numeric keyboard and able to flash any six messages in sequence. The message panel shall also be capable of being controlled by a computer from a remote location via a cellular linkage. The Contractor shall supply the modem, the cellular phone, and the necessary software to run the sign from a remote computer at a location designated by the Engineer. The Contractor shall promptly program and/or reprogram the computer to provide the messages as directed by the Engineer.

The message panel shall be visible from 400 m (1/4 mile) under both day and night conditions. The letters shall be legible from 250 m (750 ft).

The sign shall include automatic dimming for nighttime operation and a power supply capable of providing 24 hours of uninterrupted service.

The Contractor shall provide all preventive maintenance efforts s(he) deems necessary to achieve uninterrupted service. If service is interrupted for any cause and not restored within 24 hours, the Engineer will cause such work to be performed as may be necessary to provide this service. The cost of such work shall be borne by the Contractor or deducted from current or future compensation due the Contractor.

When the sign(s) are displaying messages, they shall be considered a traffic control device. At all times when no message is displayed, they shall be considered equipment.

Basis of Payment. When portable changeable message signs are shown on the Standard, this work will not be paid for separately but shall be considered as included in the cost of the Standard.

For all other portable changeable message signs, this work will be paid for at the contract unit price per calendar month for each sign as CHANGEABLE MESSAGE SIGN.

80124

**PORTLAND CEMENT (BDE)**

Effective: January 1, 2005

Revised: November 1, 2005

Add the following paragraph after the last paragraph of Article 1001.01 of the Standard Specifications.

“For portland cement according to ASTM C 150, the bill of lading shall state if limestone has been added. The bill of lading shall also state that the limestone addition is not in excess of five percent by mass (weight) of the cement.”

80139

**PORTLAND CEMENT CONCRETE (BDE)**

Effective: November 1, 2002

Add the following paragraph after the fourth paragraph of Article 1103.01(b) of the Standard Specifications:

“The truck mixer shall be approved before use according to the Bureau of Materials and Physical Research’s Policy Memorandum, “Approval of Concrete Plants and Delivery Trucks”.”

Add the following paragraph after the first paragraph of Article 1103.01(c) of the Standard Specifications:

“The truck agitator shall be approved before use according to the Bureau of Materials and Physical Research’s Policy Memorandum, “Approval of Concrete Plants and Delivery Trucks”.”

Add the following paragraph after the first paragraph of Article 1103.01(d) of the Standard Specifications:

“The nonagitator truck shall be approved before use according to the Bureau of Materials and Physical Research’s Policy Memorandum, “Approval of Concrete Plants and Delivery Trucks”.”

Revise the first sentence of the first paragraph of Article 1103.02 of the Standard Specifications to read:

“The plant shall be approved before production begins according to the Bureau of Materials and Physical Research’s Policy Memorandum, “Approval of Concrete Plants and Delivery Trucks”.”

80083

## **PRECAST CONCRETE PRODUCTS (BDE)**

Effective: July 1, 1999

Revised: November 1, 2004

Product Approval. Precast concrete products shall be produced according to the Department's current Policy Memorandum, "Quality Control/Quality Assurance Program for Precast Concrete Products". The Policy Memorandum applies to precast concrete products listed under the Products Key of the "Approved List of Certified Precast Concrete Producers".

Precast Concrete Box Culverts. Add the following sentence to the end of the fourth paragraph of Article 540.06:

"After installation, the interior and exterior joint gap between precast concrete box culvert sections shall not exceed 38 mm (1 1/2 in.)."

Portland Cement Replacement. For precast concrete products using Class PC concrete or other mixtures, portland cement replacement with fly ash or ground granulated blast-furnace (GGBF) slag shall be governed by the AASHTO or ASTM standard specification referenced in the Standard Specifications.

For all other precast concrete products using Class PC concrete or other mixtures, portland cement replacement with fly ash or GGBF slag shall be approved by the Engineer. Class F fly ash shall not exceed 15 percent by mass (weight) of the total portland cement and Class F fly ash. Class C fly ash shall not exceed 20 percent by mass (weight) of the total portland cement and Class C fly ash. GGBF slag shall not exceed 25 percent by mass (weight) of the total portland cement and GGBF slag.

Concrete mix designs, for precast concrete products, shall not consist of portland cement, fly ash and GGBF slag.

Ready-Mixed Concrete. Delete the last paragraph of Article 1020.11(a) of the Standard Specifications.

Shipping. When a precast concrete product has attained the specified strength, the earliest the product may be loaded, shipped, and used is on the fifth calendar day. The first calendar day shall be the date casting was completed.

Acceptance. Products which have been lot or piece inspected and approved by the Department prior to July 1, 1999, will be accepted for use on this contract.

419.doc

**PRECAST, PRESTRESSED CONCRETE MEMBERS (BDE)**

Effective: April 1, 2004

Revise the tables, "Maximum Allowable Dimensional Tolerances for Precast, Prestressed I-beams and Bulb T-beams" in Article 504.06(d) of the Standard Specifications to read:

| "Maximum Allowable Dimensional Tolerances for<br>Precast, Prestressed Concrete I-Beams<br>and Bulb T-Beams   |                                |
|--|--------------------------------|
| mm   |                                |
| Depth (flanges, web and fillets) .....   | ± 5                            |
| Depth (overall) .....  | + 5 to - 3                     |
| Width (flanges and fillets) .....  | ± 5                            |
| Width (web) .....  | + 5 to - 3                     |
| Length .....   | ± 3 per 3 m, max. + 15 to - 20 |
| Square Ends (deviation from square) .....  | ± 5                            |
| Skew Ends (deviation from tangent offset) .....  | ± 5                            |
| Side Insert (spacing between centers of inserts<br>and from the centers of inserts to the ends of the beams) .....   | ± 15                           |
| Bearing Plates (spacing between the centers of<br>bearing plates) .....  | ± 15                           |
| Bearing Plate (spacing between the centers of<br>bearing plates to the ends of the beams) .....  | ± 5                            |
| Bearing Plate or Bearing Area (variation from a<br>true horizontal plane or from a plane surface<br>when tested with a straightedge) .....   | ± 2                            |
| Stirrup Bars (extension above top of the beam) .....   | 0 to - 10                      |
| Stirrup Bars longitudinal spacing  |                                |
| Within a distance equal to the depth of the member<br>and measured from the end of the member .....  | + 25                           |
| In all other locations .....   | + 50                           |
| <p>The number of stirrups shall not be less than the required number in each length. Additional stirrups may be added when the maximum allowable tolerance is exceeded provided the minimum clearance between stirrups is not less than 50 mm.</p> |                                |
| <p>End Stirrup Bars - not more than 50 mm from the end of the beam</p>   |                                |
| Horizontal Alignment (deviation from a straight line parallel<br>to the centerline of the beam) .....  | ± 3 per 3 m, max. ± 30         |

| Maximum Allowable Dimensional Tolerances For<br>Precast, Prestressed Concrete I-Beams<br>and Bulb T-Beams<br>(English)  |                                    |
|---|------------------------------------|
|   | in.                                |
| Depth (flanges, web and fillets) .....  | ± 1/4                              |
| Depth (overall) .....   | + 1/4 to - 1/8                     |
| Width (flanges and fillets) .....   | ± 1/4                              |
| Width (web) .....   | + 1/4 to - 1/8                     |
| Length .....  | ± 1/8 per 10', max. + 1/2 to - 3/4 |
| Square Ends (deviation from square) .....   | ± 1/4                              |
| Skew Ends (deviation from tangent offset) .....   | ± 1/4                              |
| Side Insert (spacing between centers of inserts<br>and from the centers of inserts to the ends of the beams) .....  | ± 1/2                              |
| Bearing Plates (spacing between the centers of<br>bearing plates) .....   | ± 1/2                              |
| Bearing Plate (spacing between the centers of<br>bearing plates to the ends of the beams) .....   | ± 1/4                              |
| Bearing Plate or Bearing Area (variation from a<br>true horizontal plane or from a plane surface<br>when tested with a straightedge) .....  | ± 1/16                             |
| Stirrup Bars (extension above top of the beam) .....  | 0 to - 3/8                         |
| Stirrup Bars longitudinal spacing   |                                    |
| Within a distance equal to the depth of the member<br>and measured from the end of the member .....   | + 1                                |
| In all other locations .....  | + 2                                |
| <p>The number of stirrups shall not be less than the required number in each length. Additional stirrups may be added when the maximum allowable tolerance is exceeded provided the minimum clearance between stirrups is not less than 2 in.</p> |                                    |
| <p>End Stirrup Bars - not more than 2" from the end of the beam</p>   |                                    |
| Horizontal Alignment (deviation from a straight line parallel<br>to the centerline of the beam) .....   | ± 1/8 per 10 ft, max. ± 1 1/4"     |

80120

**PREFORMED RECYCLED RUBBER JOINT FILLER (BDE)**

Effective: November 1, 2002

Revise Article 503.02(c) of the Standard Specifications to read:

“(c) Preformed Expansion Joint Filler ..... 1051”

Revise Article 637.02(d) of the Standard Specifications to read:

“(d) Preformed Expansion Joint Filler ..... 1051”

Add the following Article to Section 1051 of the Standard Specifications:

“1051.10 Preformed Recycled Rubber Joint Filler. Preformed recycled rubber joint filler shall consist of ground tire rubber, free of steel and fabric, combined with ground scrap or waste polyethylene. It shall not have a strong hydrocarbon or rancid odor and shall meet the physical property requirements of ASTM D 1752. Water absorption by volume shall not exceed 5.0 percent.”

80084

**RAISED REFLECTIVE PAVEMENT MARKERS (BRIDGE) (BDE)**

Effective: August 1, 2003

Add the following sentence to the end of the second paragraph of Article 781.03(a) of the Standard Specifications:

“The installed height for the reflective pavement markers shall be approximately 7.5 mm (0.3 in.) above the road surface.”

Revise Article 781.05 of the Standard Specifications to read:

“**781.05 Basis of Payment.** This work will be paid for at the contract unit price per each for RAISED REFLECTIVE PAVEMENT MARKER, RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE), TEMPORARY RAISED REFLECTIVE PAVEMENT MARKER, and REPLACEMENT REFLECTOR.”

Revise the first paragraph of Article 1096.01(b) of the Standard Specifications to read:

“(b) The overall dimensions for raised reflective pavement markers shall be approximately 254 mm (10 in.) long by 140 mm (5.5 in.) wide and a maximum of 45 mm (1.76 in.) high. The overall dimensions for bridge raised reflective pavement markers shall be approximately 235 mm (9.25 in.) long by 149 mm (5.86 in.) wide and a maximum of 32 mm (1.25 in.) high. The surface of the keel and web shall be free of scale, dirt, rust, oil, grease, or any other contaminant which may reduce the bond.”

80105

**RAP FOR USE IN BITUMINOUS CONCRETE MIXTURES (BDE)**

Effective: January 1, 2000

Revised: April 1, 2002

Revise Article 1004.07 to read:



**“1004.07 RAP Materials.** RAP is reclaimed asphalt pavement resulting from cold milling or crushing of an existing dense graded hot-mix asphalt pavement. RAP must originate from routes or airfields under federal, state or local agency jurisdiction. The Contractor shall supply documentation that the RAP meets these requirements.

(a) Stockpiles. The Contractor shall construct individual, sealed RAP stockpiles meeting one of the following definitions. No additional RAP will be allowed on top of the pile after the pile has been sealed.

(1) Homogeneous. Homogeneous RAP stockpiles shall consist of RAP from Class I/ Superpave, or equivalent mixtures only and represent the same aggregate quality, but shall be at least C quality or better, the same type of crushed aggregate (either crushed natural aggregate, ACBF slag, or steel slag), similar gradation and similar AC content. If approved by the Engineer, combined single pass surface/binder millings may be considered “homogenous”, with a quality rating dictated by the lowest coarse aggregate quality present in the mixture. Homogenous stockpiles shall meet the requirements of Article 1004.07(d). Homogeneous RAP stockpiles not meeting these requirements may be processed (crushing and screening) and retested.

(2) Conglomerate. Conglomerate RAP stockpiles shall consist of RAP from Class I/ Superpave, or equivalent mixtures only. The coarse aggregate in this RAP shall be crushed aggregate only and may represent more than one aggregate type and/or quality but shall be at least C quality or better. This RAP may have an inconsistent gradation and/or asphalt cement content prior to processing. All conglomerate RAP shall be processed prior to testing by crushing to where all RAP shall pass the 16 mm (5/8 in.) or smaller screen. Conglomerate RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department. Conglomerate RAP stockpiles shall meet the requirements of Article 1004.07(d).

(3) Conglomerate “D” Quality (DQ). Conglomerate DQ RAP stockpiles shall consist of RAP containing coarse aggregate (crushed or round) that is at least D quality or better. This RAP may have an inconsistent gradation and/or asphalt content. Conglomerate DQ RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department. Conglomerate DQ RAP shall meet the requirements of Article 1004.07(d).

Reclaimed Superpave Low ESAL IL-9.5L surface mixtures shall only be placed in conglomerate DQ RAP stockpiles due to the potential for rounded aggregate.

(4) Other. RAP stockpiles that do not meet the requirements of the stockpile categories listed above shall be classified as “Other”. “Other” RAP stockpiles shall not be used in any of the Department’s bituminous mixtures.

(b) Use. The allowable use of a RAP stockpile shall be set by the lowest quality of coarse aggregate in the RAP stockpile. Class I/Superpave surface mixtures are designated as containing Class B quality coarse aggregate only. Superpave Low ESAL IL-19.0L binder

and IL-9.5L surface mixtures are designated as Class C quality coarse aggregate only. Class I/Superpave binder mixtures, bituminous base course mixtures, and bituminous base course widening mixtures are designated as containing Class C quality coarse aggregate only. Bituminous stabilized subbase and BAM shoulders are designated as containing Class D quality coarse aggregate only. Any mixture not listed above shall have the designated quality determined by the Department.

RAP containing steel slag or other expansive material, as determined by the Department, shall be homogeneous and will be approved for use in Class I/Superpave (including Low ESAL) surface mixtures only. RAP stockpiles for use in Class I/Superpave mixtures (including Low ESAL), base course, base course widening and Class B mixtures shall be either homogeneous or conglomerate RAP stockpiles except conglomerate RAP stockpiles shall not be used in Superpave surface mixture Ndesign 50 or greater. RAP for use in bituminous aggregate mixtures (BAM) shoulders and BAM stabilized subbase shall be from homogeneous, conglomerate, or conglomerate DQ stockpiles.

Additionally, RAP used in Class I/Superpave surface mixtures shall originate from milled or crushed mixtures only, in which the coarse aggregate is of Class B quality or better. RAP stockpiles for use in Class I/Superpave (including Low ESAL) binder mixes as well as base course, base course widening and Class B mixtures shall originate from milled or processed surface mixture, binder mixture, or a combination of both mixtures uniformly blended to the satisfaction of the Engineer, in which the coarse aggregate is of Class C quality or better.

(c) Contaminants. RAP containing contaminants, such as earth, brick, sand, concrete, sheet asphalt, bituminous surface treatment (i.e. chip seal), pavement fabric, etc., will be unacceptable unless the contaminants are removed to the satisfaction of the Engineer. Sheet asphalt shall be stockpiled separately.

(d) Testing. All RAP shall be sampled and tested either during or after stockpiling.

For testing during stockpiling, washed extraction samples shall be run at the minimum frequency of one sample per 450 metric tons (500 tons) for the first 1800 metric tons (2,000 tons) and one sample per 1800 metric tons (2,000 tons) thereafter. A minimum of five tests shall be required for stockpiles less than 3600 metric tons (4,000 tons).

For testing existing stockpiles, the Contractor shall submit a plan for approval to the District proposing a satisfactory method of sampling and testing the RAP pile either in-situ or by restockpiling. The sampling plan shall meet the minimum frequency required above and detail the procedure used to extract representative samples throughout the pile for testing.

Before extraction, each field sample shall be split to test sample size. One of the two test samples from the final split shall be labeled and stored for Department use. The Contractor shall extract the other test sample according to Department procedure. The Engineer reserves the right to test any sample (split or Department-taken) to verify Contractor test results.

All of the extraction results shall be compiled and averaged for asphalt content and gradation. Individual extraction test results, when compared to the averages, will be accepted if within the tolerances listed below.

| Parameter         | Homogeneous / Conglomerate | Conglomerate "D" Quality |
|-------------------|----------------------------|--------------------------|
| 25 mm (1 in.)     |                            | ± 5%                     |
| 12.5 mm (1/2 in.) | ± 8%                       | ± 15%                    |
| 4.75 mm (No. 4)   | ± 6%                       | ± 13%                    |
| 2.36 mm (No. 8)   | ± 5%                       |                          |
| 1.18 mm (No. 16)  |                            | ± 15%                    |
| 600 μm (No. 30)   | ± 5%                       |                          |
| 75 μm (No. 200)   | ± 2.0%                     | ± 4.0%                   |
| AC                | ± 0.4%                     | ± 0.5%                   |

If more than 20 percent of the individual sieves are out of the gradation tolerances, or if more than 20 percent of the asphalt content test results fall outside the appropriate tolerances, the RAP will not be allowed to be used in the Department's bituminous concrete mixtures unless the RAP representing the failing tests is removed from the stockpile to the satisfaction of the Engineer. All test data and acceptance ranges shall be sent to the District for evaluation.

With the approval of the Engineer, the ignition oven may be substituted for extractions according to the Illinois Test Procedure, "Calibration of the Ignition Oven for the Purpose of Characterizing Reclaimed Asphalt Pavement (RAP)".

- (e) Designs. At the Contractor's option, bituminous concrete mixtures may be constructed utilizing RAP material meeting the above detailed requirements. The amount of RAP included in the mixture shall not exceed the percentages specified in the plans.

RAP designs shall be submitted for volumetric verification. If additional RAP stockpiles are tested and found that no more than 20 percent of the results, as defined under "Testing" herein, are outside of the control tolerances set for the original RAP stockpile and design, and meets all of the requirements herein, the additional RAP stockpiles may be used in the original mix design at the percent previously verified.

- (f) Production. The coarse aggregate in all RAP used shall be equal to or less than the nominal maximum size requirement for the bituminous mixture being produced.

To remove or reduce agglomerated material, a scalping screen, crushing unit or comparable sizing device approved by the Engineer shall be used in the RAP feed system to remove or reduce oversized material. If material passing the sizing device adversely affects the mix production or quality of the mix, the sizing device shall be set at a size specified by the Engineer.

If the RAP control tolerances or QC/QA test results require corrective action, the Contractor shall cease production of the mixture containing RAP and either switch to the virgin aggregate design or submit a new RAP design.

80011

**REINFORCEMENT BARS (BDE)**

Effective: November 1, 2005

Revised: November 2, 2005

Revise Article 1006.10(a) of the Supplemental Specifications to read:

“(a) Reinforcement Bars. Reinforcement bars will be accepted according to the current Bureau of Materials and Physical Research Policy Memorandum, “Reinforcement Bar and Dowel Bar Plant Certification Procedure”. The Department will maintain an approved list of producers.

(1) Reinforcement Bars (Non-Coated). Reinforcement bars shall be according to ASTM A 706M (A 706), Grade 420 (60) for deformed bars and the following.

a. Chemical Composition. The chemical composition of the bars shall be according to the following table.

| CHEMICAL COMPOSITION  |                              |                                 |
|-----------------------|------------------------------|---------------------------------|
| Element <sup>1/</sup> | Heat Analysis<br>(% maximum) | Product Analysis<br>(% maximum) |
| Carbon                | 0.30                         | 0.33                            |
| Manganese             | 1.50                         | 1.56                            |
| Phosphorus            | 0.035                        | 0.045                           |
| Sulfur                | 0.045                        | 0.055                           |
| Silicon               | 0.50                         | 0.55                            |
| Nickel                | 2/                           | 2/                              |
| Chromium              | 2/                           | 2/                              |
| Molybdenum            | 2/                           | 2/                              |
| Copper                | 2/                           | 2/                              |
| Titanium              | 2/                           | 2/                              |
| Vanadium              | 2/                           | 2/                              |
| Columbium             | 2/                           | 2/                              |
| Aluminum              | 2/, 3/                       | 2/, 3/                          |
| Tin <sup>4/</sup>     | 0.040                        | 0.044                           |

Note 1/. The bars shall not contain any traces of radioactive elements.

Note 2/. There is no composition limit but the element must be reported.

Note 3/. If aluminum is not an intentional addition to the steel for deoxidation or killing purposes, residual aluminum content need not be reported.

Note 4/. If producer bar testing indicates an elongation of 15 percent or more and passing of the bend test, the tin composition requirement may be waived.

- b. Heat Numbers. Bundles or bars at the construction site shall be marked or tagged with heat identification numbers of the bar producer.
  - c. Guided Bend Test. Bars may be subject to a guided bend test across two pins which are free to rotate, where the bending force shall be centrally applied with a fixed or rotating pin of a certain diameter as specified in Table 3 of ASTM A 706M (A 706). The dimensions and clearances of this guided bend test shall be according to ASTM E 190.
  - d. Spiral Reinforcement. Spiral reinforcement shall be deformed or plain bars conforming to the above requirements or cold-drawn steel wire conforming to AASHTO M 32.
- (2) Epoxy Coated Reinforcement Bars. Epoxy coated reinforcement bars shall be according to Article 1006.10(a)(1) and shall be epoxy coated according to AASHTO M 284M (M 284) and the following.
- a. Certification. The epoxy coating applicator shall be certified under the Concrete Reinforcing Steel Institute's (CRSI) Epoxy Plant Certification Program.
  - b. Coating Thickness. The thickness of the epoxy coating shall be 0.18 to 0.30 mm (7 to 12 mils). When spiral reinforcement is coated after fabrication, the thickness of the epoxy coating shall be 0.18 to 0.50 mm (7 to 20 mils).
  - c. Cutting Reinforcement. Reinforcement bars may be sheared or sawn to length after coating, providing the end damage to the coating does not extend more than 13 mm (0.5 in.) back and the cut is patched before any visible rusting appears. Flame cutting will not be permitted."

80151

### **SEALING ABANDONED WATER WELLS (BDE)**

Effective: November 1, 2002

Description. This work shall consist of sealing abandoned water wells. Work shall be performed according to the "Illinois Water Well Construction Code (77 Illinois Administrative Code 920)".

Work shall be performed by a licensed water well driller. A list of licensed water well drillers is available from the Illinois Department of Public Health offices in Springfield.

Any available information, such as well type, diameter, depth and geologic data will be shown on the plans.

Basis of Payment. This work will be paid for at the contract unit price per each for SEALING ABANDONED WATER WELLS.

80085

**SEEDING AND SODDING (BDE)**

Effective: July 1, 2004

Revised: August 1, 2005

Revise Class 1A and 2A seeding mixtures shown in Table 1 of Article 250.07 of the Standard Specifications to read:

| "Table 1 - SEEDING MIXTURES             |                        |                         |
|---|------------------------|-------------------------|
| Class – Type                            | Seeds                  | kg/hectare<br>(lb/acre) |
| 1A Salt Tolerant<br>Lawn Mixture 7/     | Bluegrass              | 70 (60)                 |
|   | Perennial Ryegrass     | 20 (20)                 |
|   | Audubon Red Fescue     | 20 (20)                 |
|   | Rescue 911 Hard Fescue | 20 (20)                 |
|   | Fults Salt Grass*      | 70 (60)                 |
| 2A Salt Tolerant<br>Roadside Mixture 7/ | Alta Fescue or Ky 31   | 70 (60)                 |
|   | Perennial Ryegrass     | 20 (20)                 |
|   | Audubon Red Fescue     | 20 (30)                 |
|   | Rescue 911 Hard Fescue | 20 (30)                 |
|   | Fults Salt Grass 1/    | 70 (60)"                |

Revise Note 7 of Article 250.07 of the Standard Specifications to read:

"Note 7. In Districts 1 through 6, the planting times shall be April 1 to June 15 and August 1 to November 1. In Districts 7 through 9, the planting times shall be March 1 to June 1 and August 1 to November 15. Seeding may be performed outside these dates provided the Contractor guarantees a minimum of 75 percent uniform growth over the entire seeded area(s) after one growing season. The guarantee shall be submitted to the Engineer in writing prior to performing the work. After one growing season, areas not sustaining 75 percent uniform growth shall be interseeded or reseeded, as determined by the Engineer, at the Contractor's expense."

Add the following sentence to Article 252.04 of the Standard Specifications:

“Sod shall not be placed during the months of July and August.”

Revise the first paragraph of Article 252.08 of the Standard Specifications to read:

**“252.08 Sod Watering.** Within two hours after the sod has been placed, water shall be applied at a rate of 25 L/sq m (5 gal/sq yd). Additional water shall be applied every other day at a rate of 15 L/sq m (3 gal/sq yd) for a total of 15 additional waterings. During periods exceeding 26 °C (80 °F) or subnormal rainfall, the schedule of additional waterings may be altered with the approval of the Engineer.”

Revise Article 252.09 of the Standard Specifications to read:

**“252.09 Supplemental Watering.** During periods exceeding 26 °C (80 °F) or subnormal rainfall, supplemental watering may be required after the initial and additional waterings. Supplemental watering shall be performed when directed by the Engineer. Water shall be applied at the rate specified by the Engineer within 24 hours of notice.”

Revise the first and third paragraphs of Article 252.12 of the Standard Specifications to read:

**“252.12 Method of Measurement.** Sodding will be measured for payment in place and the area computed in square meters (square yards). To be acceptable for final payment, the sod shall be growing in place for a minimum of 30 days in a live, healthy condition. When directed by the Engineer, any defective or unacceptable sod shall be removed, replaced and watered by the Contractor at his/her own expense.”

“Supplemental watering will be measured for payment in units of 1000 L (1000 gal) of water applied on the sodded areas. Waterings performed in addition to those required by Article 252.08 or after the 30 day establishment period will be considered as supplemental watering.”

Replace the first paragraph of Article 252.13 of the Standard Specifications with the following:

**“252.13 Basis of Payment.** Sodding will be paid for at the contract unit price per square meter (square yard) for SODDING or SODDING, SALT TOLERANT according to the following schedule.

- (a) Initial Payment. Upon placement of sod, 25 percent of the pay item will be paid.
- (b) Final Payment. Upon acceptance of sod, the remaining 75 percent of the pay item will be paid.”

Revise Article 1081.03(b) of the Standard Specifications to read:

“(b) Salt Tolerant Sod.

| Variety                              | Percent by Weight |
|--------------------------------------|-------------------|
| Buffalo Grass<br>Buchloe Dactyloides | 30%               |
| Amigo Fineleaf Tall Fescue           | 20%               |
| Audubon Red Fescue                   | 15%               |
| Rescue 911 Hard Fescue               | 15%               |
| Rugby Kentucky Bluegrass             | 5%                |
| Fults Pucinnellia Distans            | 15%”              |

Revise Table II of Article 1081.04(c)(6) of the Standard Specifications to read:

| TABLE II                    |                                 |                              |                                       |                            |   |         |
|-----------------------------|---------------------------------|------------------------------|---------------------------------------|----------------------------|---|---------|
| Variety of Seeds            | Hard Seed<br>Percent<br>Maximum | Purity<br>Percent<br>Minimum | Pure, Live<br>Seed Percent<br>Minimum | Weed<br>Percent<br>Maximum | Secondary   | Remarks |
|                             |                                 |                              |                                       |                            | Noxious Weeds<br>No. per kg (oz)<br>Max. Permitted* |         |
| Alfalfa                     | 20                              | 92                           | 89                                    | 0.50                       | 211 (6)   | 1/      |
| Brome Grass                 | -                               | 90                           | 75                                    | 0.50                       | 175 (5)   | -       |
| Clover, Alsike              | 15                              | 92                           | 87                                    | 0.30                       | 211 (6)   | 2/      |
| Clover, Crimson             | 15                              | 92                           | 83                                    | 0.50                       | 211 (6)   | -       |
| Clover, Ladino              | 15                              | 92                           | 87                                    | 0.30                       | 211 (6)   | -       |
| Clover, Red                 | 20                              | 92                           | 87                                    | 0.30                       | 211 (6)   | -       |
| Clover, White Dutch         | 30                              | 92                           | 87                                    | 0.30                       | 211 (6)   | 3/      |
| Audubon Red Fescue          | 0                               | 97                           | 82                                    | 0.10                       | 105 (3)   | -       |
| Fescue, Alta or Ky. 31      | -                               | 97                           | 82                                    | 1.00                       | 105 (3)   | -       |
| Fescue, Creeping Red        | -                               | 97                           | 82                                    | 1.00                       | 105 (3)   | -       |
| Fults Salt Grass            | 0                               | 98                           | 85                                    | 0.10                       | 70 (2)  | -       |
| Kentucky Bluegrass          | -                               | 97                           | 80                                    | 0.30                       | 247 (7)   | 5/      |
| Lespedeza, Korean           | 20                              | 92                           | 84                                    | 0.50                       | 211 (6)   | 3/      |
| Oats                        | -                               | 92                           | 88                                    | 0.50                       | 70 (2)  | 4/      |
| Orchard Grass               | -                               | 90                           | 78                                    | 1.50                       | 175 (5)   | 4/      |
| Redtop                      | -                               | 90                           | 78                                    | 1.80                       | 175 (5)   | 4/      |
| Ryegrass, Perennial, Annual | -                               | 97                           | 85                                    | 0.30                       | 175 (5)   | 4/      |
| Rye, Grain, Winter          | -                               | 92                           | 83                                    | 0.50                       | 70 (2)  | 4/      |
| Rescue 911 Hard Fescue      | 0                               | 97                           | 82                                    | 0.10                       | 105 (3)   | -       |
| Timothy                     | -                               | 92                           | 84                                    | 0.50                       | 175 (5)   | 4/      |
| Vetch, Crown                | 30                              | 92                           | 67                                    | 1.00                       | 211 (6)   | 3/ & 6/ |
| Vetch, Spring               | 30                              | 92                           | 88                                    | 1.00                       | 70 (2)  | 4/      |
| Vetch, Winter               | 15                              | 92                           | 83                                    | 1.00                       | 105 (3)   | 4/      |
| Wheat, hard Red Winter      | -                               | 92                           | 89                                    | 0.50                       | 70 (2)  | 4/      |

80131

**SELF-CONSOLIDATING CONCRETE FOR CAST-IN-PLACE CONSTRUCTION (BDE)**

Effective: November 1, 2005

Definition. Self-consolidating concrete is a flowable mixture that does not require mechanical vibration for consolidation.



Usage. Self-consolidating concrete may be used for cast-in-place concrete construction items involving Class MS and SI concrete. Self-consolidating concrete may also be used for drilled shafts.

Materials. Materials shall be according to the following.

- (a) Self-Consolidating Admixtures. The self-consolidating admixture system shall consist of either a high range water-reducing admixture only or a high range water-reducing admixture combined with a separate viscosity modifying admixture. The one or two component admixture system shall be capable of producing a concrete that can flow around reinforcement and consolidate under its own weight without additional effort and without segregation.

The high range water-reducing admixture shall comply with the requirements of AASHTO M 194, Type F.

The viscosity modifying admixture will be evaluated according to the test methods and mix design proportions referenced in AASHTO M 194, except the following physical requirements shall be met:

- (1) For initial and final set times, the allowable deviation of the test concrete from the reference concrete shall not be more than 1.0 hour earlier or 1.5 hours later.
  - (2) For compressive and flexural strengths, the test concrete shall be a minimum of 90 percent of the reference concrete at 3, 7, and 28 days.
  - (3) The length change of the test concrete shall be a maximum 135 percent of the reference concrete. However, if the length change of the reference concrete is less than 0.030 percent, the length change of the test concrete shall be a maximum 0.010 percentage units greater than the reference concrete.
  - (4) The relative durability factor of the test concrete shall be a minimum 80 percent.
- (b) Fine Aggregate. A fine aggregate used alone in the mix design shall not have an expansion greater than 0.30 percent per ASTM C 1260. For a blend of two or more fine aggregates, the resulting blend shall not have an expansion greater than 0.30 percent.

The aggregate blend expansion will be calculated as follows:

$$\text{Aggregate Blend Expansion} = (a/100 \times A) + (b/100 \times B) + (c/100 \times C) + \dots \text{etc.}$$

Where: a, b, c, ... = percent of aggregate blend  
A, B, C, ... = aggregate expansion according to ASTM C 1260

Mix Design Criteria. Article 1020.04 of the Standard Specifications shall apply except as follows:

- (a) The minimum cement factor shall be according to Article 1020.04 of the Standard Specifications or as specified. The maximum cement factor shall be 418 kg/cu m (7.05 cwt/cu yd). The cement factor shall not be reduced if a water-reducing, retarding, or high range water-reducing admixture is used.
- (b) The maximum allowable water/cement ratio shall be according to Article 1020.04 of the Standard Specifications or 0.44, whichever is lower.
- (c) The slump requirements shall not apply.
- (d) The coarse aggregate gradations shall be CA 11, CA 13, CA 14, CA 16, or a blend of these gradations. CA 11 shall not be used for drilled shafts or when the Engineer approves a horizontal flow distance greater than 9 m (30 ft). The fine aggregate proportion shall be a maximum 50 percent by mass (weight) of the total aggregate used.
- (e) The slump flow range shall be  $\pm 50$  mm ( $\pm 2$  in.) of the Contractor target value, and within the overall Department range of 510 mm (20 in.) minimum to 710 mm (28 in.) maximum.
- (f) The visual stability index shall be a maximum of 1.
- (g) The J-ring value shall be a maximum of 100 mm (4 in.). The Contractor may specify a lower maximum in the mix design.
- (h) The L-box blocking ratio shall be a minimum of 60 percent. The Contractor may specify a higher minimum in the mix design.
- (i) The column segregation index shall be a maximum 15 percent.
- (j) The hardened visual stability index shall be a maximum of 1.

Test Methods. Illinois Test Procedures SCC-1, SCC-2, SCC-3, SCC-4, SCC-5, SCC-6, and Illinois Modified AASHTO T 22, 23, 121, 126, 141, 152, 177, 196, and 309 shall be used for testing of self-consolidating concrete mixtures.

Mix Design Submittal. The Contractor's Level III PCC Technician shall submit a mix design according to the "Portland Cement Concrete Level III Technician" course manual, except target slump information is not applicable and will not be required. However, a slump flow target range shall be submitted. In addition, the design mortar factor may exceed 1.10 and durability test data will be waived.

A J-ring value shall be submitted if a lower mix design maximum will apply. An L-box blocking ratio shall be submitted if a higher mix design minimum will apply. The Contractor shall also indicate applicable construction items for the mix design.

Trial mixture information will also be required by the Engineer. A trial mixture is a batch of concrete tested by the Contractor to verify the Contractor's mix design will meet specification requirements. Trial mixture information shall include test results as specified in the "Portland Cement Concrete Level III Technician" course manual. Test results shall also include slump flow, visual stability index, J-ring value, L-box blocking ratio, column segregation index, and hardened visual stability index. For the trial mixture, the slump flow shall be near the midpoint of the proposed slump flow target range.

Trial Batch. A minimum 1.5 cu m (2 cu yd) trial batch shall be produced, and the self-consolidating concrete admixture dosage proposed by the Contractor shall be used. The slump flow shall be within 25 mm (1.0 in.) of the maximum slump flow range specified by the Contractor, and the air content shall be within the top half of the allowable specification range.

The trial batch shall be scheduled a minimum of 21 calendar days prior to anticipated use, and shall be performed in the presence of the Engineer.

The Contractor shall provide the labor, equipment, and materials to test the concrete. The mixture will be evaluated by the Engineer for strength, air content, slump flow, visual stability index, J-ring value, L-box blocking ratio, column segregation index, and hardened visual stability index.

Upon review of the test data from the trial batch, the Engineer will verify or deny the use of the mix design and notify the Contractor. Verification by the Engineer will include the Contractor's target slump flow range. If applicable, the Engineer will verify the Contractor's maximum J-ring value and minimum L-box blocking ratio.

A new trial batch will be required whenever there is a change in the source of any component material, proportions, dosage of the self-consolidating concrete admixture, batch sequence, mixing speed, mixing time, or as determined by the Engineer. The testing criteria for the new trial batch will be determined by the Engineer.

When necessary, the trial batches shall be disposed of according to Article 202.03 of the Standard Specifications.

Mixing Portland Cement Concrete. In addition to Article 1020.11 of the Standard Specifications, the mixing time for central-mixed concrete shall not be reduced as a result of a mixer performance test. Truck-mixed or shrink-mixed concrete shall be mixed in a truck mixer for a minimum of 100 revolutions.

Wash water, if used, shall be completely discharged from the drum or container before the succeeding batch is introduced.

The batch sequence, mixing speed, and mixing time shall be appropriate to prevent cement balls and mix foaming for central-mixed, truck-mixed, and shrink-mixed concrete.

Falsework and Forms. In addition to Articles 503.05 and 503.06 of the Standard Specifications, the Contractor shall design falsework and forms for full hydrostatic head pressure of the concrete. Forms shall be tight to prevent leakage of fluid concrete.

Placing and Consolidating. Concrete placement and consolidations shall be according to Article 503.07 of the Standard Specifications except as follows:

Revise the third paragraph of Article 503.07 of the Standard Specifications to read:

“Open troughs and chutes shall extend as nearly as practicable to the point of deposit. The drop distance of concrete shall not exceed 1.5 m (5 ft). If necessary, a tremie shall be used to meet this requirement. The maximum distance of horizontal flow from the point of deposit shall be 9 m (30 ft), unless approved otherwise by the Engineer. For drilled shafts, free fall placement will not be permitted.”

Delete the sixth, seventh, eighth and ninth paragraphs of Article 503.07 of the Standard Specifications.

Revise the eleventh paragraph of Article 503.07 of the Standard Specifications to read:

“Concrete shall be placed in continuous layers. When it is necessary by reason of an emergency to place less than a complete horizontal layer in one operation, such layer shall terminate in a vertical bulkhead. In order that the concrete will not be injured and that there shall be no line of separation between the batches, the separate batches shall follow each other closely as recommended by the manufacturer of the self-consolidating concrete admixture(s). In no case shall the interval of time between the placing of successive batches be greater than 20 minutes. Concrete shall be rodded with a piece of lumber or conduit if the material has lost its fluidity prior to placement of additional concrete. Any other method for restoring the fluidity of the concrete shall be approved by the Engineer. If ready-mixed concrete is used, the requirements of Article 1020.11 shall apply. Delivery of mixed concrete shall be regulated so that there will not be an interruption in the placing of concrete in the forms, as recommended by the manufacturer of the self-consolidating concrete admixture(s). In no case shall the interval of time be greater than 20 minutes.”

Quality Control by Contractor at Plant. The specified test frequencies for aggregate gradation, aggregate moisture, air content, unit weight/yield, and temperature shall be performed as indicated in the contract plans.

Slump flow, visual stability index, and J-ring or L-box tests shall be performed as needed to control production. The column segregation index test and hardened visual stability index test will not be required to be performed at the plant.

Quality Control by Contractor at Jobsite. The specified test frequencies for air content, strength, and temperature shall be performed as indicated in the contract plans.

Slump flow, visual stability index, and J-ring or L-box tests shall be performed on the first two truck deliveries of the day, and every 40 cu m (50 cu yd) thereafter. The Contractor shall select either the J-ring or L-box test for jobsite testing.

The column segregation index test will not be required to be performed at the jobsite. The hardened visual stability index test shall be performed on the first truck delivery of the day, and every 230 cu m (300 cu yd) thereafter. Slump flow, visual stability index, J-ring value or L-box blocking ratio, air content, and concrete temperature shall be recorded for each hardened visual stability index test.

The Contractor shall retain all hardened visual stability index cut cylinder specimens until the Engineer notifies the Contractor that the specimens may be discarded.

If mix foaming or other potential detrimental material is observed during placement or at the completion of the pour, the material shall be removed while the concrete is still plastic.

Quality Assurance by Engineer at Plant. For air content and aggregate gradation, quality assurance independent sample testing and split sample testing will be performed as indicated in the contract plans.

For slump flow, visual stability index, and J-ring or L-box tests, quality assurance independent sample testing and split sample testing will be performed as determined by the Engineer.

Quality Assurance by Engineer at Jobsite. For air content and strength, quality assurance independent sample testing and split sample testing will be performed as indicated in the contract plans.

For slump flow, visual stability index, J-ring or L-box, and hardened visual stability index tests, quality assurance independent sample testing will be performed as determined by the Engineer.

For slump flow and visual stability index quality assurance split sample testing, the Engineer will perform tests at the beginning of the project on the first three tests performed by the Contractor. Thereafter, a minimum of ten percent of total tests required of the Contractor will be performed per plant, which will include a minimum of one test per mix design. The acceptable limit of precision will be 25 mm (1 in.) for slump flow, and a limit of precision will not apply to the visual stability index.

For the J-ring or the L-box quality assurance split sample testing, a minimum of 80 percent of the total tests required of the Contractor will be witnessed by the Engineer per plant, which will include a minimum of one witnessed test per mix design. The Engineer reserves the right to conduct quality assurance split sample testing. The acceptable limit of precision will be 25 mm (1 in.) for the J-ring value and ten percent for the L-box blocking ratio.

For each hardened visual stability index test performed by the Contractor, the cut cylinders shall be presented to the Engineer for determination of the rating. The Engineer reserves the right to conduct quality assurance split sample testing. A limit of precision will not apply to the hardened visual stability index.

80152

**SELF-CONSOLIDATING CONCRETE FOR PRECAST PRODUCTS (BDE)**

Effective: July 1, 2004

Revised: November 1, 2005

Definition. Self-consolidating concrete is a flowable mixture that does not require mechanical vibration for consolidation.

Usage. Self-consolidating concrete may be used for precast concrete products.

Materials. Materials shall be according to the following.

- (a) Self-Consolidating Admixtures. The self-consolidating admixture system shall consist of either a high range water-reducing admixture only or a high range water-reducing admixture combined with a separate viscosity modifying admixture. The one or two component admixture system shall be capable of producing a concrete that can flow around reinforcement and consolidate under its own weight without additional effort and without segregation.

The high range water-reducing admixture shall comply with the requirements of AASHTO M 194, Type F.

The viscosity modifying admixture will be evaluated according to the test methods and mix design proportions referenced in AASHTO M 194, except the following physical requirements shall be met:

- (1) For initial and final set times, the allowable deviation of the test concrete from the reference concrete shall not be more than 1.0 hour earlier or 1.5 hours later.
  - (2) For compressive and flexural strengths, the test concrete shall be a minimum of 90 percent of the reference concrete at 3, 7 and 28 days.
  - (3) The length change of the test concrete shall be a maximum 135 percent of the reference concrete. However, if the length change of the reference concrete is less than 0.030 percent, the length change of the test concrete shall be a maximum 0.010 percentage units greater than the reference concrete.
  - (4) The relative durability factor of the test concrete shall be a minimum 80 percent.
- (b) Fine Aggregate. A fine aggregate used alone in the mix design shall not have an expansion greater than 0.30 percent per ASTM C 1260. For a blend of two or more fine aggregates, the resulting blend shall not have an expansion greater than 0.30 percent.

The aggregate blend expansion will be calculated as follows:

$$\text{Aggregate Blend Expansion} = (a/100 \times A) + (b/100 \times B) + (c/100 \times C) + \dots\text{etc.}$$

Where: a, b, c, ... = percent of aggregate blend  
A, B, C, ... = aggregate expansion according to ASTM C 1260

Mix Design Criteria. The mix design criteria shall be as follows:

- (a) The minimum cement factor shall be according to Article 1020.04 of the Standard Specifications or as specified. The maximum cement factor shall be 418 kg/cu m (7.05 cwt/cu yd).
- (b) The maximum allowable water/cement ratio shall be according to Article 1020.04 of the Standard Specifications or 0.44, whichever is lower.
- (c) The slump requirements of Article 1020.04 of the Standard Specifications shall not apply.
- (d) The coarse aggregate gradations shall be CA 11, CA 13, CA 14, CA 16, or a blend of these gradations. CA 11 shall not be used when the Engineer approves a horizontal flow distance greater than 9 m (30 ft). The fine aggregate proportion shall be a maximum 50 percent by mass (weight) of the total aggregate used.
- (e) The slump flow range shall be  $\pm 50$  mm ( $\pm 2$  in.) of the Contractor target value, and within the overall Department range of 510 mm (20 in.) minimum to 710 mm (28 in.) maximum.
- (f) The visual stability index shall be a maximum of 1.
- (g) The J-ring value shall be a maximum of 100 mm (4 in.). The Contractor may specify a lower maximum in the mix design.
- (h) The L-box blocking ratio shall be a minimum of 60 percent. The Contractor may specify a higher minimum in the mix design.
- (i) The column segregation index shall be a maximum 15 percent.
- (j) The hardened visual stability index shall be a maximum of 1.

Mix Design Approval. The Contractor shall obtain mix design approval according to the Department's Policy Memorandum "Quality Control/Quality Assurance Program for Precast Concrete Products".

80132

**SHOULDER RUMBLE STRIPS (BDE)**

Effective: January 1, 2003

Delete the third paragraph of Article 482.06 of the Standard Specifications.

Delete the last two sentences of the fourth paragraph of Article 483.06 of the Standard Specifications.

Add the following to the Standard Specifications:

#### **“SECTION 642. SHOULDER RUMBLE STRIPS**

**642.01 Description.** This work shall consist of constructing rumble strips in shoulders.

**642.02 Equipment.** The equipment shall be a self-propelled milling machine with a rotary-type cutting head(s). The cutting head(s) shall be suspended from the machine such that it can align itself with the slope of the shoulder and any irregularities in the shoulder surface. The teeth of the cutting head(s) shall be arranged to provide a smooth cut, with no more than a 3 mm (1/8 in.) difference between peaks and valleys.

Prior to commencement of the work, the Contractor shall demonstrate, to the satisfaction of the Engineer, the ability of the equipment to achieve the desired results without damaging the shoulder.

#### **CONSTRUCTION REQUIREMENTS**

**642.03 General.** The rumble strips shall be cut to the dimensions shown on the plans. Guides shall be used to ensure consistent alignment, spacing and depth. In portland cement concrete shoulders, rumble strips may be formed according to the details shown on the plans immediately after the application of the final finish.

Rumble strips shall be omitted within the limits of structures, entrances, side roads, entrance ramps and exit ramps. In portland cement concrete shoulders, rumble strips shall not be placed within 150 mm (6 in.) of transverse joints.

Cuttings resulting from this operation shall be disposed of according to Article 202.03 of the Standard Specifications and the shoulders shall be swept clean.

**642.04 Method of Measurement.** This work will be measured for payment in meters (feet) along the edge of pavement. Measurement will include both the cut and uncut (formed and unformed) sections of the shoulder rumble strips with exceptions for bridge decks, approach pavements, turn lanes, entrances and other sections where shoulder rumble strips have been omitted.

**642.05 Basis of Payment.** This work will be paid for at the contract unit price per meter (foot) for SHOULDER RUMBLE STRIPS.”

#### **SHOULDER STABILIZATION AT GUARDRAIL (BDE)**

Effective: January 1, 2005

Revise the last sentence of the second paragraph of Article 630.06 of the Standard Specifications to read:



“The void around each post shall be backfilled with earth or aggregate and capped with 75 mm (3 in.) of bituminous mixture or grout.”

Replace the last sentence of the third paragraph of Article 630.06 of the Standard Specifications with the following:

“Guardrail posts shall be driven through holes cored in the completed shoulder stabilization. The void around each post shall be backfilled with earth or aggregate and capped with 75 mm (3 in.) of bituminous mixture or grout.”

Add the following paragraph to the end of Article 630.06 of the Standard Specifications:

“When driving guardrail posts through existing shoulders, shoulder stabilization, or other paved areas, the posts shall be driven through cored holes. The void around each post shall be backfilled with earth or aggregate and capped with 75 mm (3 in.) of bituminous mixture or grout.”

80140

**SOIL MODIFICATION (BDE)**

Effective: November 1, 2004

Revised: April 1, 2006

Revise Section 302 of the Standard Specifications to read:

**“SECTION 302. SOIL MODIFICATION**

**302.01 Description.** This work shall consist of constructing a modified soil layer composed of soil, water, and a modifier.

**302.02 Materials.** Materials shall meet the requirements of the following Articles of Section 1000 Materials:

| Item  | Article/Section           |
|---|---------------------------|
| (a) Type I Portland Cement .....                    | 1001                      |
| (b) Type I (SM) Slag-Modified Portland Cement ..... | 1001                      |
| (c) Water.....                                      | 1002                      |
| (d) Hydrated Lime.....                              | 1012.01                   |
| (e) By-Product, Hydrated Lime (Note 1)              |                           |
| (f) By-Product, Non-Hydrated Lime (Note 2)          |                           |
| (g) Lime Slurry (Note 3)                            |                           |
| (h) Class C Fly Ash (Note 4)                        |                           |
| (i) Soil (Note 5)                                   |                           |
| (j) Bituminous Materials (Note 6).....              | 1009.07, 1009.08, 1009.09 |

Note 1. By-product, hydrated lime (hydrator tailings) shall conform to the following requirements:

| Parameter  | Value        |
|--|--------------|
| Total calcium and magnesium oxides (nonvolatile basis)   | 90 % minimum |
| Available calcium hydroxide (rapid sugar test, ASTM C 25) plus total MgO content calculated to be equivalent $\text{Ca(OH)}_2$ | 70 % minimum |
| As received loss on ignition (carbon dioxide plus moisture, combined and free)   | 5 % maximum  |
| Free water (as-received basis)   | 4 % maximum  |
| $\text{SO}_3$  | 10 % maximum |

The sieve analysis of the lime residue shall be as follows:

| Sieve                       | Maximum Percent Retained |
|-----------------------------|--------------------------|
| 4.75 mm (No. 4)             | 0                        |
| 600 $\mu\text{m}$ (No. 30)  | 10                       |
| 150 $\mu\text{m}$ (No. 100) | 60                       |

Note 2. By-product, non-hydrated lime (lime kiln dust) shall conform to the following requirements:

| Parameter  | Value        |
|--|--------------|
| Total calcium and magnesium oxides (nonvolatile basis)   | 60 % minimum |
| Available calcium hydroxide (rapid sugar test, ASTM C 25) plus total MgO content calculated to be equivalent $\text{Ca(OH)}_2$ | 30 % minimum |
| As received loss on ignition (carbon dioxide plus moisture, combined and free)   | 40 % maximum |
| Free water (as received basis)   | 4 % maximum  |
| $\text{SO}_3$  | 10 % maximum |

The sieve analysis of the lime residue shall be as follows:

| Sieve                       | Maximum Percent Retained |
|-----------------------------|--------------------------|
| 4.75 mm (No. 4)             | 5                        |
| 600 $\mu\text{m}$ (No. 30)  | 10                       |
| 150 $\mu\text{m}$ (No. 100) | 30                       |

Note 3. The lime used in the slurry shall be either hydrated lime conforming to the requirements of ASTM C 207, Type N, or quicklime conforming to the requirements for calcium lime as stated in ASTM C 5. The quantity of lime (hydrated lime or quicklime) in the slurry shall be a minimum of 35 percent and a maximum of 45 percent by total mass (weight) of slurry.

Note 4. The fly ash shall meet the physical and chemical requirements of AASHTO M 295, Class C.

Note 5. When lime (slurry or dry) is used as the modifier, the soil shall have a minimum clay content of 15 percent, determined according to AASHTO T 88; and shall have a maximum organic matter content of ten percent, determined according to AASHTO T 194.

Note 6. The bituminous materials used for curing shall be emulsified asphalt RS-1, RS-2, CRS-1, CRS-2, HFE 60, HFE 90, or HFE 150; rapid curing liquid asphalt RC-70 or RC-250; or medium curing liquid asphalt MC-70 or MC-250.

**302.03 Equipment.** Equipment shall meet the requirements of the following Articles of Section 1100 - Equipment:

| Item                               | Article/Section |
|------------------------------------|-----------------|
| (a) Rotary Speed Mixer .....       | 1101.06         |
| (b) Disk Harrow (Note 1).....      | 1101.02         |
| (c) Distributor (Note 2)           |                 |
| (d) Lime Slurry Equipment (Note 3) |                 |

Note 1. A disk harrow may be used for soil modification with portland cement, slag-modified portland cement, or lime (slurry or dry) when permitted by the Engineer.

Note 2. The distributor shall be of a mechanical type and shall be approved by the Engineer.

Note 3. The equipment used for mixing, transporting, slaking, and placing lime slurry shall be approved by the Engineer.

**302.04 Proportioning.** Proportioning shall be as follows.

(a) Samples. Samples of the soil modifier(s) and the project soil(s) shall be obtained and submitted to the Engineer at least 45 days prior to the construction of the modified soil. Sample sizes shall be a minimum of 12 kg (25 lb) for the modifier(s) and 90 kg (200 lb) for the project soil(s).

(b) Mix Design. The actual proportions of modifier, soil, and water will be determined by the Engineer prior to construction using the submitted samples. The Engineer reserves the right to make such adjustments in proportions as are considered necessary during the progress of the work.

In no case shall proportions or type of modifier be changed during the progress of the work without permission by the Engineer.

## CONSTRUCTION REQUIREMENTS

**302.05 General.** The modified soil shall be constructed when the temperature of the soil, measured 150 mm (6 in.) below the surface, is above 10 °C (50 °F); and the ambient air temperature in the shade is above 7 °C (45 °F).

The quantity of modified soil constructed shall be limited to that which can be covered by the succeeding pavement layer during the same construction season.

**302.06 Preparation of Subgrade.** The area to be processed shall be shaped to the proper grade and cross section. All vegetation and other objectionable material shall be removed from within the limits of modification. In cut or at grade sections, the subgrade shall be prepared according to Article 301.03; except the minimum immediate bearing value (IBV) of the soil below the soil to be modified, shall be according to the Department's "Subgrade Stability Manual".

**302.07 Application of Modifier.** The modifier shall be applied uniformly on the soil. The application of modifier shall be limited to that amount which can be incorporated into the soil within the same working day.

After application of dry modifiers, but before the addition of any water, the surface of the subgrade shall be lightly scarified or disked. When lime slurry is used, the surface of the subgrade shall be lightly scarified or disked prior to application of the slurry.

Dry modifiers shall not be applied when wind conditions are such that blowing modifier becomes objectionable to adjacent property owners or creates a hazard to traffic on adjacent highways, as determined by the Engineer.

Lime slurry shall be applied within 30 days of preparing and mixing the slurry, and shall be thoroughly agitated prior to application.

Modifier which has been damaged by hydration due to rain prior to or during the mixing operations, or has been displaced by the Contractor's equipment or other traffic after application shall be replaced.

**302.08 Mixing.** The modifier, soil, and water shall be thoroughly mixed. Mixing shall continue until a homogeneous layer of the required thickness has been obtained and a minimum of 75 percent of the mixture is smaller than 25 mm (1 in.). The moisture content of the modified soil shall be between optimum and three percent above optimum.

For soil modification with fly ash, more than one pass of the rotary speed mixer may be necessary to obtain a homogenous mixture. If more than one pass of the rotary speed mixer is required, the application of the fly ash shall be modified such that 25 percent of the specified fly ash quantity is applied and mixed with a down-cut motion as a preparation for the final pass of the rotary speed mixer. The remaining specified quantity of fly ash shall be applied prior to the final pass of the rotary speed mixer. Mixing shall continue until a minimum 75 percent of the mixture is smaller than 25 mm (1 in.).

**302.09 Compaction.** Compaction of soil modified with portland cement, slag-modified portland cement, or fly ash shall be completed no later than one hour after mixing begins.

Compaction of soil modified with hydrated lime or by-product non-hydrated lime shall be completed within the same working day.

Compaction of soil modified with lime slurry shall begin within 24 hours.

Compaction of soil modified with by-product hydrated lime shall be delayed a minimum of 24 hours. The Engineer may require additional water or further mixing prior to the final compaction of soil modified with by-product hydrated lime. In no case shall compaction be started later than three days after mixing unless approved by the Engineer. If compaction is to be delayed, the surface of the soil shall be crown-graded and sealed from moisture loss by either blade dragging or light rolling immediately after mixing.

The compacted, modified soil shall have a minimum dry density of 95 percent of the laboratory standard dry density. The in place dry density will be determined according to AASHTO T 191, or Illinois Modified AASHTO T 310 (Direct Transmission Density/Backscatter Moisture). The laboratory standard dry density will be determined according to AASHTO T 99.

**302.10 Finishing and Curing.** When multiple lifts are used to construct the modified soil layer, the top lift shall be a minimum of 150 mm (6 in.) thick when compacted.

When compaction of the modified soil is nearing completion, the surface shall be shaped to the required lines, grades, and cross section shown on the plans. For bituminous concrete base course and pavement (full-depth) and portland cement concrete base course and pavement, the surface of the modified soil shall be brought to true shape and correct elevation according to Article 301.06, except that well compacted earth shall not be used to fill low areas.

The modified soil shall be cured for a minimum of 24 hours. The ambient air temperature shall be above 7 °C (45 °F) during curing.

Soils modified with lime (slurry or dry) generally will not require curing unless the minimum stability requirements in Article 302.11 cannot be met. If it has been determined by the Engineer that curing is necessary, the curing requirements stated above shall apply.

During the curing period, the moisture content of the modified soil shall be maintained at optimum by sprinkling with water, use of plastic sheeting, or applying bituminous materials according to Article 312.19. During this period, no equipment or traffic will be permitted on the completed work beyond that required for maintenance of curing.

Equipment of such weight, or used in such a way as to cause a rut depth of 12 mm (0.5 in.) or more in the finished modified soil, shall be removed, or the rutting otherwise prevented, as directed by the Engineer.

**302.11 Subgrade Stability.** Following curing, the Engineer will determine the stability of the modified soil in terms of the immediate bearing value (IBV), according to Illinois Test Procedure 501. The IBV shall be a minimum of 10.0.

No equipment or traffic shall be on the modified soil after compaction until the required IBV is attained.

**302.12 Method of Measurement.** This work will be measured for payment as follows.

- (a) Contract Quantities. The requirements for the use of contract quantities shall conform to Article 202.07(a).
- (b) Measured Quantities. Processing modified soils will be measured for payment in place and the area computed in square meters (square yards). The width for measurement will be as shown on the plans.

Modifier will be measured for payment in metric tons (tons). The modifier will be measured in trucks or freight cars. The Contractor shall furnish or arrange for use of scales of a type approved by the Engineer. When the modifier is shipped in trucks, it shall be measured at the place of loading, at the place of unloading, or at such other place as the Engineer may designate. The Engineer may accept original signed freight bills in lieu of determining the mass (weight).

Should the Contractor's method of construction require additional earth excavation or embankment due to requiring more than one lift to construct the modified soil layer as shown on the plans, this extra earth excavation and embankment will not be measured for payment.

**302.13 Basis of Payment.** This work will be paid for at the contract unit price per square meter (square yard) for PROCESSING MODIFIED SOIL, of the thickness specified; and per metric ton (ton) for LIME, FLY ASH, PORTLAND CEMENT, or SLAG-MODIFIED PORTLAND CEMENT.”

80135

**STABILIZED SUBBASE AND BITUMINOUS SHOULDERS SUPERPAVE (BDE)**

Effective: April 1, 2002

Revised: August 1, 2005

Description. This work shall consist of constructing stabilized subbase and bituminous shoulders Superpave according to Sections 312 and 482 respectively, of the Standard Specifications and the special provision, “Quality Control/Quality Assurance of Bituminous Concrete Mixtures” except as modified herein.

Revise Article 312.03(b) of the Standard Specifications to read:

“(b) RAP Material (Note 3)”

Revise Note 2 of Article 312.03 of the Standard Specifications to read:

“Note 2. Gradation CA 6, CA 10, or CA 12 shall be used.”

Revise Note 3 of Article 312.03 of the Standard Specifications to read:

"Note 3. RAP shall meet the requirements of the special provision "RAP for Use in Bituminous Concrete Mixtures". RAP containing steel slag shall be permitted for use in top-lift surface mixtures only."

Revise Note 4 of Article 312.03 of the Standard Specifications to read:

"Note 4. Unless otherwise specified on the plans, the bituminous material shall be performance graded asphalt cement, PG58-22. When more than 15 percent RAP is used, a softer PG binder may be required as determined by the Engineer."

Revise Article 312.06 of the Standard Specifications to read:

**"312.06 Mixture Design.** The Contractor shall submit mix designs for approval, for each required mixture. Mix designs shall be developed by Level III personnel who have completed the course, "Superpave Mix Design Upgrade". The mixtures shall be designed according to the respective Illinois Modified AASHTO references listed below:

- AASHTO MP 2 Standard Specification for Superpave Volumetric Mix Design
- AASHTO R 30 Standard Practice for Mixture Conditioning of Hot-Mix Asphalt (HMA)
- AASHTO PP 28 Standard Practice for Designing Superpave HMA
- AASHTO T 209 Theoretical Maximum Specific Gravity and Density of Bituminous Paving Mixtures
- AASHTO T 312 Preparing and Determining the Density of Hot Mix Asphalt (HMA) Specimens by Means of the Superpave Gyratory Compactor
- AASHTO T 308 Determining the Asphalt Content of Hot Mix Asphalt (HMA) by the Ignition Method

(a) Job Mix Formula (JMF). The JMF shall be according to the following limits:

| <u>Ingredient</u>   | <u>Percent by Dry Weight</u> |
|---------------------|------------------------------|
| Aggregate.....      | 94.0 to 96.0                 |
| Asphalt Cement..... | 4.0 to 6.0*                  |
| Dust/AC Ratio ..... | 1.4                          |

\*Upper limit may be raised for the lower or top lifts if the Contractor elects to use a highly absorptive coarse and/or fine aggregate requiring more than six percent asphalt. The additional asphalt shall be furnished at no cost to the Department.

When RAP material is being used, the JMF shall be according to the following limits:

| <u>Ingredient</u>                  | <u>Percent by Dry Weight</u> |
|------------------------------------|------------------------------|
| Virgin Aggregate(s) .....          | 46.0 to 96.0                 |
| RAP Material(s) (Note 1).....      | 0 to 50                      |
| Mineral Filler (if required) ..... | 0 to 5.0                     |
| Asphalt Cement.....                | 4.0 to 7.0                   |
| Dust/AC Ratio .....                | 1.4                          |

Note 1. If specified on the plans, the maximum percentage of RAP shall be as specified therein.

It is recommended that the selected combined aggregate gradation not pass through the restricted zones specified in Illinois Modified AASHTO MP 2.

(b) Volumetric Requirements.

|                             |                                |
|-----------------------------|--------------------------------|
| Design Compactive<br>Effort | Design Air Voids<br>Target (%) |
| $N_{DES} = 30$              | 2.0                            |

(c) Determination of Need for Anti-Stripping Additive. The mixture designer shall determine if an additive is needed in the mix to prevent stripping. The determination will be made on the basis of tests performed according to Illinois Modified AASHTO T 283 using 4 in. Marshall bricks. To be considered acceptable by the Engineer as a mixture not susceptible to stripping, the ratio of conditioned to unconditioned split tensile strengths (TSR) shall be equal to or greater than 0.75. Mixtures, either with or without an additive, with TSR values less than 0.75 will be considered unacceptable.

If it is determined that an additive is required, the additive may be hydrated lime, slaked quicklime, or a liquid additive, at the Contractor's option. The liquid additive shall be selected from the Department's list of approved additives and may be limited to those which have exhibited satisfactory performance in similar mixes.

Dry hydrated lime shall be added at a rate of 1.0 to 1.5 percent by weight of total dry aggregate. Slurry shall be added in such quantity as to provide the required amount of hydrated lime solids by weight of total dry aggregate. The exact rate of application for all anti-stripping additives will be determined by the Engineer. The method of application shall be according to Article 406.12 of the Standard Specifications."

Revise Article 312.08 of the Standard Specifications to read:



**"312.08 Mixture Production.** When a hot-mix plant conforming to Article 1102.01 is used, the aggregate shall be dried and heated in the revolving dryer to a temperature of 120 °C (250 °F) to 175 °C (350 °F).

The aggregate and bituminous material used in the bituminous aggregate mixture shall be measured separately and accurately by weight or by volume. When the aggregate is in the mixer, the bituminous material shall be added and mixing continued for a minimum of 35 seconds and until a homogeneous mixture is produced in which all particles of the aggregate are coated. The mixing period, size of the batch and the production rate shall be approved by the Engineer.

The ingredients shall be heated and combined in such a manner as to produce a mixture which, when discharged from the mixer, shall be workable and vary not more 10 °C (20 °F) from the temperature set by the Engineer.

When RAP material(s) is used in the bituminous aggregate mixture, the virgin aggregate(s) shall be dried and heated in the dryer to a temperature that will produce the specified resultant mix temperature when combined with the RAP material.

The heated virgin aggregates and mineral filler shall be combined with RAP material in such a manner as to produce a bituminous mixture which when discharged from the mixer shall not vary more than 15 °C (30 °F) from the temperature set by the Engineer. The combined ingredients shall be mixed for a minimum of 35 seconds and until a homogeneous mixture as to composition and temperature is obtained. The total mixing time shall be a minimum of 45 seconds consisting of dry and wet mixing. Variation in wet and dry mixing times may be permitted, depending on the moisture content and amount of salvaged material used. The mix temperature shall not exceed 175 °C (350 °F). Wide variations in the mixture temperature will be cause for rejection of the mix.

- (a) Personnel. The QC Manager and Level I Technician shall have successfully completed the Department's "Superpave Field Control Course".
- (b) Required Tests. Testing for stabilized subbase and bituminous shoulders shall be conducted to control the production of the bituminous mixture using the test methods identified and performed at a frequency not less than indicated in the following table.

| Parameter  | Frequency of Tests<br>Non-Class I Mixtures  | Test Method   |
|--|---|---|
| Aggregate Gradation<br><br>Hot bins for batch and continuous plants.<br><br>Individual cold-feeds or combined belt-feed for drier-drum plants.<br><br>(% passing sieves:<br>12.5 mm (1/2 In.),<br>4.75 mm (No. 4),<br>75 µm (No. 200)) | 1 gradation per day of production.<br><br>The first day of production shall be washed ignition oven test on the mix. Thereafter, the testing shall alternate between dry gradation and washed ignition oven test on the mix.<br><br>The dry gradation and the washed ignition oven test results shall be plotted on the same control chart. | Illinois Procedure (See Manual of Test Procedures for Materials). |
| Asphalt Content by ignition oven (Note 1.)   | 1 per day   | Illinois-Modified AASHTO T 308                                    |
| Air Voids  |   |   |
| Bulk Specific Gravity of Gyratory Sample   | 1 per day   | Illinois-Modified AASHTO T 312                                    |
| Maximum Specific Gravity of Mixture  | 1 per day   | Illinois-Modified AASHTO T 209                                    |

Note 1. The Engineer may waive the ignition oven requirement for AC content if the aggregates to be used are known to have ignition AC content calibration factors which exceed 1.5 percent. If the ignition oven requirement is waived, other Department approved methods shall be used to determine the AC content.

During production, the ratio of minus 75 µm (#200) sieve material to total asphalt cement shall be not less than 0.6 nor more than 1.6, and the moisture content of the mixture at discharge from the mixer shall not exceed 0.5 percent. If at any time the ratio of minus 75 µm (#200) material to asphalt or moisture content of the mixture falls outside the stated limits, production of the mix shall cease. The cause shall be determined and corrective action satisfactory to the Engineer shall be initiated prior to resumption of production.

During production, mixture containing an anti-stripping additive will be tested by the Engineer for stripping according to Illinois Modified AASHTO T 283. If the mixture fails to meet the TSR criteria for acceptance, no further mixture will be accepted until the Contractor takes such action as is necessary to furnish a mixture meeting the criteria.

- (c) Control Charts/Limits. Control charts/limits shall be according to QC/QA requirements for Non-Class I Mixtures except air voids and density shall be plotted on the control charts within the following control limits:

| Individual Test Control Limits |                                 |
|--------------------------------|---------------------------------|
| Voids                          | ±1.2%                           |
| Density <sup>1/</sup>          | 93.0 – 97.4% of G <sub>mm</sub> |

- 1/ Except when placed as first lift over unimproved subgrade. When the exception applies, the first lift over unimproved subgrade shall be compacted to an average density of not less than 95 percent nor greater than 102 percent of the target density obtained on the growth curve.

Replace Article 312.10 of the Standard Specifications with the following:

**“312.10 Placing.** After the subgrade has been compacted and is acceptable to the Engineer, the bituminous aggregate mixture shall be spread upon it with a mechanical spreader. The maximum compacted thickness of each lift shall be 150 mm (6 in.) provided the required density is obtained. The minimum compacted thickness of each lift shall be according to the following table:

| Nominal Maximum Aggregate Size of Mixture | Minimum Compacted Lift Thickness |
|---|----------------------------------|
| CA 12 – 12.5 mm (1/2 in.)                 | 38 mm (1 1/2 in.)                |
| CA 10 - 19 mm (3/4 in.)                   | 57 mm (2 1/4 in.)                |
| CA 6 – 25 mm (1 in.)                      | 76 mm (3 in.)                    |

The surface of each lift shall be clean and dry before succeeding lifts are placed.”

Revise Article 482.02 of the Standard Specifications to read:

**“482.02 Materials.** Materials shall meet the requirements of Article 312.03. For the top lift, the aggregate used shall meet the gradation requirements for a CA 10 or CA 12. Blending of aggregates to meet these gradation requirements will be permitted.”

Revise the first paragraph of Article 482.04 of the Standard Specifications to read:

**“482.04 General.** For pavement and shoulder resurfacing projects, Superpave binder and surface course mixtures may be used in lieu of bituminous aggregate mixture for the resurfacing of shoulders, at the option of the Contractor, or shall be used when specified on the plans.”

Revise Article 482.04(c) of the Standard Specifications to read:

“(c) Mixture Production .....312.08”

Revise Article 482.05 of the Standard Specifications to read:

**“482.05 Composition of Bituminous Aggregate Mixture.** The composition of the mixture shall be according to Article 312.06, except that the amount of asphalt cement used in the top lift shall be increased up to 0.5 percent more than that required in the lower lifts. For resurfacing projects when the Superpave binder and surface course mixtures option is used, the asphalt cement used in the top lift shall not be increased. Superpave mixtures used on the top lift of such shoulders shall meet the gradation requirements of the special provision “Superpave Bituminous Concrete Mixtures”.

For shoulder and strip construction, the composition of the Superpave binder and surface course shall be the same as that specified for the mainline pavement.”

In the following locations of Section 482 of the Standard Specifications, change “Class I” to “Superpave”:

- the second paragraph of Article 482.04
- the first sentence of the second paragraph of Article 482.06
- the first sentence of the fourth paragraph of Article 482.06
- the second sentence of the fourth paragraph of Article 482.06
- the first sentence of the third paragraph of Article 482.08(b)

Revise the first paragraph of Article 482.06 of the Standard Specifications to read:

**“482.06 Placing.** This work shall be according to Article 312.10 as modified herein. The mechanical spreader for the top lift of shoulders shall meet the requirements of Article 1102.03 when the shoulder width is 3 m (10 ft) or greater.”

Revise Article 482.09 of the Standard Specifications to read:

**"482.09 Basis of Payment.** When bituminous shoulders are constructed along the edges of the completed pavement structure, this work will be paid for at the contract unit price per square meter (square yard) for BITUMINOUS SHOULDERS SUPERPAVE of the thickness specified. The specified thickness shall be the thickness shown on the plans at the edge of the pavement.

On pavement and shoulder resurfacing projects, the shoulder resurfacing will be paid for at the contract unit price per metric ton (ton) for BITUMINOUS SHOULDERS SUPERPAVE.

The construction of shoulder strips for resurfacing pavements will be paid according to the special provision, “Superpave Bituminous Concrete Mixtures”.

80070

### **STEEL PLATE BEAM GUARDRAIL (BDE)**

Effective: November 1, 2005

Add the following to the end of the first paragraph of Article 1006.25 of the Standard Specifications:

"The thickness of the galvanized coating for each side of the guardrail shall be at least 610 g/sq m (2.00 oz/sq ft). The thickness of the zinc or zinc alloy will be determined for each side using the average of at least three non-destructive test readings taken on that side of the guardrail."

80153

**SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE)**

Effective: April 2, 2005

To account for the preparatory work and operations necessary for the movement of subcontractor personnel, equipment, supplies, and incidentals to the project site and for all other work or operations that must be performed or costs incurred when beginning work approved for subcontracting in accordance with Article 108.01 of the Standard Specifications, the Contractor shall make a mobilization payment to each subcontractor.

This mobilization payment shall be made at least 14 days prior to the subcontractor starting work. The amount paid shall be equal to 3 percent of the amount of the subcontract reported on form BC 260A submitted for the approval of the subcontractor's work.

This provision shall be incorporated directly or by reference into each subcontract approved by the Department.

80143

**SUBGRADE PREPARATION (BDE)**

Effective: November 1, 2002

Revise the tenth paragraph of Article 301.03 of the Standard Specifications to read:

“Equipment of such weight, or used in such a way as to cause a rut in the finished subgrade of 13 mm (1/2 in.) or more in depth, shall be removed from the work or the rutting otherwise prevented.”

80086

**SUPERPAVE BITUMINOUS CONCRETE MIXTURES (BDE)**

Effective: January 1, 2000

Revised: April 1, 2004

Description. This work shall consist of designing, producing and constructing Superpave bituminous concrete mixtures using Illinois Modified Strategic Highway Research Program (SHRP) Superpave criteria. This work shall be according to Sections 406 and 407 of the Standard Specifications and the special provision, "Quality Control/Quality Assurance of Bituminous Concrete Mixtures", except as follows.

Materials.

- (a) Fine Aggregate Blend Requirement. The Contractor may be required to provide FA 20 manufactured sand to meet the design requirements. For mixtures with  $N_{design} \geq 90$ , at least 50 percent of the required fine aggregate fraction shall consist of either stone sand, slag sand, or steel slag sand meeting the FA/FM 20 gradation.

- (b) Reclaimed Asphalt Pavement (RAP). If the Contractor is allowed to use more than 15 percent RAP, as specified in the plans, a softer performance-graded binder may be required as determined by the Engineer.

RAP shall meet the requirements of the special provision, "RAP for Use in Bituminous Concrete Mixtures".

RAP will not be permitted in mixtures containing polymer modifiers.

RAP containing steel slag will be permitted for use in top-lift surface mixtures only.

- (c) Bituminous Material. The asphalt cement (AC) shall be performance-graded (PG) or polymer modified performance-graded (SBS-PG or SBR-PG) meeting the requirements of Article 1009.05 of the Standard Specifications for the grade specified on the plans.

The following additional guidelines shall be used if a polymer modified asphalt is specified:

- (1) The polymer modified asphalt cement shall be shipped, maintained, and stored at the mix plant according to the manufacturer's requirements. Polymer modified asphalt cement shall be placed in an empty tank and shall not be blended with other asphalt cements.
- (2) The mixture shall be designed using a mixing temperature of  $163 \pm 3$  °C ( $325 \pm 5$  °F) and a gyratory compaction temperature of  $152 \pm 3$  °C ( $305 \pm 5$  °F).
- (3) Pneumatic-tired rollers will not be allowed unless otherwise specified by the Engineer. A vibratory roller meeting the requirements of Article 406.16 of the Standard Specifications shall be required in the absence of the pneumatic-tired roller.

#### Laboratory Equipment.

- (a) Superpave Gyratory Compactor. The superpave gyratory compactor (SGC) shall be used for all QC/QA testing.
- (b) Ignition Oven. The ignition oven shall be used to determine the AC content. The ignition oven shall also be used to recover aggregates for all required washed gradations.

The Engineer may waive the ignition oven requirement for AC content if the aggregates to be used are known to have ignition AC content calibration factors which exceed 1.5 percent. If the ignition oven requirement is waived, other Department approved methods shall be used to determine the AC content.

Mixture Design. The Contractor shall submit mix designs, for approval, for each required mixture. Mix designs shall be developed by Level III personnel who have successfully completed the course, "Superpave Mix Design Upgrade". Articles 406.10 and 406.13 of the Standard Specifications shall not apply. The mixtures shall be designed according to the respective Illinois Modified AASHTO references listed below.

|              |   |
|--------------|---|
| AASHTO MP 2  | Standard Specification for Superpave Volumetric Mix Design  |
| AASHTO R 30  | Standard Practice for Mixture Conditioning of Hot-Mix Asphalt (HMA)   |
| AASHTO PP 28 | Standard Practice for Designing Superpave HMA   |
| AASHTO T 209 | Theoretical Maximum Specific Gravity and Density of Bituminous Paving Mixtures  |
| AASHTO T 312 | Preparing and Determining the Density of Hot Mix Asphalt (HMA) Specimens by Means of the Superpave Gyratory Compactor |
| AASHTO T 308 | Determining the Asphalt Content of Hot Mix Asphalt (HMA) by the Ignition Method                                       |

- (a) Mixture Composition. The ingredients of the bituminous mixture shall be combined in such proportions as to produce a mixture conforming to the composition limits by weight. The gradation mixture specified on the plans shall produce a mixture falling within the limits specified in Table 1.

| TABLE 1. MIXTURE COMPOSITION (% PASSING) <sup>1/</sup> |            |                  |            |                  |                          |                  |                         |                  |
|--|------------|------------------|------------|------------------|--------------------------|------------------|-------------------------|------------------|
| Sieve Size   | IL-25.0 mm |                  | IL-19.0 mm |                  | IL-12.5 mm <sup>4/</sup> |                  | IL-9.5 mm <sup>4/</sup> |                  |
|  | min        | max              | min        | max              | Min                      | max              | min                     | max              |
| 37.5 mm<br>(1 1/2 in.)                                 |            | 100              |            |                  |                          |                  |                         |                  |
| 25 mm<br>(1 in.)                                       | 90         | 100              |            | 100              |                          |                  |                         |                  |
| 19 mm<br>(3/4 in.)                                     |            | 90               | 82         | 100              |                          | 100              |                         |                  |
| 12.5 mm<br>(1/2 in.)                                   | 45         | 75               | 50         | 85               | 90                       | 100              |                         | 100              |
| 9.5 mm<br>(3/8 in.)                                    |            |                  |            |                  |                          | 89               | 90                      | 100              |
| 4.75 mm<br>(#4)  | 24         | 42 <sup>2/</sup> | 24         | 50 <sup>2/</sup> | 28                       | 65               | 28                      | 65               |
| 2.36 mm<br>(#8)  | 16         | 31               | 20         | 36               | 28                       | 48 <sup>3/</sup> | 28                      | 48 <sup>3/</sup> |
| 1.18 mm<br>(#16)                                       | 10         | 22               | 10         | 25               | 10                       | 32               | 10                      | 32               |
| 600 μm<br>(#30)  |            |                  |            |                  |                          |                  |                         |                  |
| 300 μm<br>(#50)  | 4          | 12               | 4          | 12               | 4                        | 15               | 4                       | 15               |
| 150 μm<br>(#100)                                       | 3          | 9                | 3          | 9                | 3                        | 10               | 3                       | 10               |
| 75 μm<br>(#200)  | 3          | 6                | 3          | 6                | 4                        | 6                | 4                       | 6                |

- 1/ Based on percent of total aggregate weight.
- 2/ The mixture composition shall not exceed 40 percent passing the 4.75 mm (#4) sieve for binder courses with Ndesign ≥ 90.
- 3/ The mixture composition shall not exceed 40 percent passing the 2.36 mm (#8) sieve for surface courses with Ndesign ≥ 90.
- 4/ The mixture composition for surface courses shall be according to IL-12.5 mm or IL-9.5 mm, unless otherwise specified by the Engineer.

One of the above gradations shall be used for leveling binder as specified in the plans and according to Article 406.04 of the Standard Specifications.

It is recommended that the selected combined aggregate gradation not pass through the restricted zones specified in Illinois Modified AASHTO MP 2.



- (b) Dust/AC Ratio for Superpave. The ratio of material passing the 75  $\mu\text{m}$  (#200) sieve to total asphalt cement shall not exceed 1.0 for mixture design (based on total weight of mixture).
- (c) Volumetric Requirements. The target value for the air voids of the hot mix asphalt (HMA) shall be 4.0 percent at the design number of gyrations. The VMA and VFA of the HMA design shall be based on the nominal maximum size of the aggregate in the mix and shall conform to the requirements listed in Table 2.

| <b>TABLE 2. VOLUMETRIC REQUIREMENTS</b> |  |                |                |               |   |
|---|--|----------------|----------------|---------------|---|
| <b>Ndesign</b>                          | <b>Voids in the Mineral Aggregate (VMA), % minimum</b> |                |                |               | <b>Voids Filled with Asphalt (VFA), %</b> |
|   | <b>IL-25.0</b>   | <b>IL-19.0</b> | <b>IL-12.5</b> | <b>IL-9.5</b> |   |
| <b>50</b>                               | 12.0   | 13.0           | 14.0           | 15            | 65 - 78                                   |
| <b>70</b>                               |  |                |                |               | 65 - 75                                   |
| <b>90</b>                               |  |                |                |               |   |
| <b>105</b>                              |  |                |                |               |   |

- (d) Determination of Need for Anti-Stripping Additive. The mixture designer shall determine if an additive is needed in the mix to prevent stripping. The determination will be made on the basis of tests performed according to Illinois Modified T 283 using 4 in. Marshall bricks. To be considered acceptable by the Department as a mixture not susceptible to stripping, the ratio of conditioned to unconditioned split tensile strengths (TSRs) shall be equal to or greater than 0.75. Mixtures, either with or without an additive, with TSRs less than 0.75 will be considered unacceptable.

If it is determined that an additive is required, the additive may be hydrated lime, slaked quicklime, or a liquid additive, at the Contractor's option. The liquid additive shall be selected from the Department's list of approved additives and may be limited to those which have exhibited satisfactory performance in similar mixes.

Dry hydrated lime shall be added at a rate of 1.0 to 1.5 percent by weight of total dry aggregate. Slurry shall be added in such quantity as to provide the required amount of hydrated lime solids by weight of total dry aggregate. The exact rate of application for all anti-stripping additives will be determined by the Department. The method of application shall be according to Article 406.12 of the Standard Specifications.

Personnel. The QC Manager and Level I Technician shall have successfully completed the Department's "Superpave Field Control Course".

Required Plant Tests. Testing shall be conducted to control the production of the bituminous mixture. The Contractor shall use the test methods identified to perform the following mixture tests at a frequency not less than that indicated in Table 3.

| TABLE 3. REQUIRED PLANT TESTS for SUPERPAVE   |   |  |
|---|---|--|
| Parameter   | Frequency of Tests  | Test Method  |
| Aggregate Gradation<br><br>Hot bins for batch and continuous plants<br><br>Individual cold-feeds or combined belt-feed for drier drum plants.<br><br>(% passing sieves:<br>12.5 mm (1/2 in.),<br>4.75 mm (No. 4),<br>2.36 mm (No. 8),<br>600 µm (No. 30),<br>75 µm (No. 200)) | 1 dry gradation per day of production (either morning or afternoon sample).<br><br>And<br><br>1 washed ignition oven test on the mix per day of production (conduct in afternoon if dry gradation is conducted in the morning or vice versa).<br><br>NOTE. The order in which the above tests are conducted shall alternate from the previous production day (example: a dry gradation conducted in the morning will be conducted in the afternoon on the next production day and so forth).<br><br>The dry gradation and washed ignition oven test results shall be plotted on the same control chart. | Illinois Procedure (See Manual of Test Procedures for Materials).                                |
| Asphalt Content by Ignition Oven (Note 1.)  | 1 per half day of production  | Illinois Modified AASHTO T 308   |
| Air Voids   | Bulk Specific Gravity of Gyratory Sample  | 1 per half day of production for first 2 days and 1 per day thereafter (first sample of the day) |
|   | Maximum Specific Gravity of Mixture   | Illinois Modified AASHTO T 209   |

Note 1. The Engineer may waive the ignition oven requirement for AC content if the aggregates to be used are known to have ignition AC content calibration factors which exceed 1.5 percent. If the ignition oven requirement is waived, other Department approved methods shall be used to determine the AC content.

During production, the ratio of minus 75 µm (#200) sieve material to total asphalt cement shall be not less than 0.6 nor more than 1.2 and the moisture content of the mixture at discharge from the mixer shall not exceed 0.5 percent. If at any time the ratio of minus 75 µm (#200) material to asphalt or moisture content of the mixture falls outside the stated limits, production of the mix shall cease. The cause shall be determined and corrective action satisfactory to the Engineer shall be initiated prior to resuming production.

During production, mixtures containing an anti-stripping additive will be tested by the Department for stripping according to Illinois Modified T 283. If the mixture fails to meet the TSR criteria for acceptance, no further mixture will be accepted until the Contractor takes such action as is necessary to furnish a mixture meeting the criteria.

Construction Requirements

Lift Thickness.

- (a) Binder and Surface Courses. The minimum compacted lift thickness for constructing bituminous concrete binder and surface courses shall be according to Table 4:

| <b>TABLE 4 – MINIMUM COMPACTED LIFT THICKNESS</b> |                     |
|---|---------------------|
| Mixture   | Thickness, mm (in.) |
| IL-9.5  | 32 (1 1/4)          |
| IL-12.5   | 38 (1 1/2)          |
| IL-19.0   | 57 (2 1/4)          |
| IL-25.0   | 76 (3)              |

- (b) Leveling Binder. Mixtures used for leveling binder shall be as follows:

| <b>TABLE 5 – LEVELING BINDER</b>                        |                   |
|---|-------------------|
| Nominal, Compacted, Leveling Binder Thickness, mm (in.) | Mixture           |
| ≤ 32 (1 1/4)  | IL-9.5            |
| 32 (1 1/4) to 50 (2)                                    | IL 9.5 or IL-12.5 |

Density requirements shall apply for leveling binder when the nominal, compacted thickness is 32 mm (1 1/4 in.) or greater for IL-9.5 mixtures and 38 mm (1 1/2 in.) or greater for IL-12.5 mixtures.

- (c) Full-Depth Pavement. The compacted thickness of the initial lift of binder course shall be 100 mm (4 in.). The compacted thickness of succeeding lifts shall meet the minimums specified in Table 4 but not exceed 100 mm (4 in.).

If a vibratory roller is used for breakdown, the compacted thickness of the binder lifts, excluding the top lift, may be increased to 150 mm (6 in.) provided the required density is obtained.

- (d) Bituminous Patching. The minimum compacted lift thickness for constructing bituminous patches shall be according to Table 4.

Control Charts/Limits. Control charts/limits shall be according to QC/QA Class I requirements, except density shall be plotted on the control charts within the following control limits:

| <b>TABLE 6. DENSITY CONTROL LIMITS</b> |                          |                 |
|--|--------------------------|-----------------|
| Mixture                                | Parameter                | Individual Test |
| 12.5 mm / 9.5 mm                       | N <sub>design</sub> ≥ 90 | 92.0 – 96.0%    |
| 12.5 mm / 9.5 mm                       | N <sub>design</sub> < 90 | 92.5 – 97.4%    |
| 19.0 mm / 25.0 mm                      | N <sub>design</sub> ≥ 90 | 93.0 – 96.0%    |
| 19.0 mm / 25.0 mm                      | N <sub>design</sub> < 90 | 93.0 – 97.4%    |

Basis of Payment. On resurfacing projects, this work will be paid for at the contract unit price per metric ton (ton) for BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, of the friction aggregate mixture and Ndesign specified, LEVELING BINDER (HAND METHOD), SUPERPAVE, of the Ndesign specified, LEVELING BINDER (MACHINE METHOD), SUPERPAVE, of the Ndesign specified, and BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, of the mixture composition and Ndesign specified.

On resurfacing projects in which polymer modifiers are required, this work will be paid for at the contract unit price per metric ton (ton) for POLYMERIZED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, of the friction aggregate mixture and Ndesign specified, POLYMERIZED LEVELING BINDER (HAND METHOD), SUPERPAVE, of the Ndesign specified, POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, of the Ndesign specified, and POLYMERIZED BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, of the mixture composition and Ndesign specified.

On full-depth pavement projects, this work will be paid for at the contract unit price per square meter (square yard) for BITUMINOUS CONCRETE PAVEMENT, (FULL-DEPTH), SUPERPAVE, of the thickness specified.

On projects where widening is constructed and the entire pavement is then resurfaced, the binder for the widening will be paid for at the contract unit price per square meter (square yard) for BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, of the mixture composition, Ndesign, and thickness specified. The surface and binder used to resurface the entire pavement will be paid for according to the paragraphs above for resurfacing projects.

80010

**SURFACE TESTING OF PAVEMENTS (BDE)**

Effective: April 1, 2002

Revised: November 1, 2005

**Bituminous Concrete Overlays**

Revise Article 406.03(k) of the Standard Specifications to read:

“(k) Pavement Surface Test Equipment ..... 1101.10”

Revise Article 406.21 of the Standard Specifications to read:

**“406.21 Surface Tests.** The finished surface of the pavement shall be tested for smoothness within three days of paving. Testing shall be performed in the presence of the Engineer.

Prior to testing, a copy of the approval letter and recorded settings from the Profile Equipment Verification (PEV) Program shall be submitted to the Engineer; and all objects and debris shall be removed from the pavement.

(a) Test Sections/Equipment.

- (1) High-Speed Mainline Pavement. High-speed mainline pavement shall consist of pavements, ramps and loops with a posted speed greater than 75 km/hr (45 mph). These sections shall be tested using a California Profilograph or an approved equivalent.
- (2) Low-Speed Mainline Pavement. Low-speed mainline pavement shall consist of pavements, ramps and loops with a posted speed of 75 km/hr (45 mph) or less. These sections shall be tested using a California Profilograph or an approved equivalent.
- (3) Miscellaneous Pavement. Miscellaneous pavement shall consist of:
  - a. pavement on horizontal curves with a centerline radius of curvature of less than or equal to 300 m (1000 ft) and pavement within the superelevation transition of such curves;
  - b. the first or last 4.5 m (15 ft) of a pavement section where the Contractor is not responsible for the adjoining surface;
  - c. intersections;
  - d. variable width pavements;
  - e. side street returns;
  - f. crossovers;
  - g. connector pavement from mainline pavement expansion joint to the bridge approach pavement;
  - h. bridge approach pavement; and
  - i. other miscellaneous pavement surfaces (i.e. a turn lane) as determined by the Engineer.

Miscellaneous pavement shall be tested using a 5 m (16 ft) straightedge set to a 10 mm (3/8 in.) tolerance.

(b) Lots/Sublots. Mainline pavement test sections will be divided into lots and sublots.

- (1) Lots. A lot will be defined as a continuous strip of pavement 1600 m (1 mile) long and one lane wide. When the length of a continuous strip of pavement is less than 1600 m (1 mile), that pavement will be included in an adjacent lot. Structures will be omitted when measuring pavement length.

(2) Sublots. Lots will be divided into 160 m (0.1 mile) sublots. A partial subplot resulting from an interruption in the pavement will be subject to the same evaluation as a whole subplot.

(c) Testing Procedure. One wheel track shall be tested per lane. Testing shall be performed 1 m (3 ft) from and parallel to the edge of the lane away from traffic. A guide shall be used to maintain the proper distance.

The profile trace generated shall have stationing indicated every 150 m (500 ft) at a minimum. Both ends of the profile trace shall be labeled with the following information: contract number, beginning and ending stationing, which direction is up on the trace, which direction the data was collected, and the device operator name(s). The top portion of the Department supplied form, "Profile Report of Pavement Smoothness" shall be completed and secured around the trace roll.

Although surface testing of intermediate lifts will not be required, they may be performed at the Contractor's option. When this option is chosen, the testing shall be performed and the profile traces shall be generated as described above.

The Engineer may perform his/her own testing at any time for monitoring and comparison purposes.

(d) Trace Reduction and Bump Locating Procedure. All traces shall be reduced. Traces produced by a mechanical recorder shall be reduced using an electronic scanner and computer software. This software shall calculate the profile index of each subplot in mm/km (in./mile) and indicate any high points (bumps) in excess of 8 mm (0.30 in.) with a line intersecting the profile on the printout. Computerized recorders shall provide the same information.

The profile index of each track, average profile index of each subplot, average profile index of the lot and locations of bumps shall be recorded on the form.

All traces and reports shall be provided within two working days of completing the testing to the Engineer for the project file. Traces from either a computerized profile testing device or analysis software used with a manual profile testing device shall display the settings used for the data reduction. The Engineer will compare these settings with the approved settings from the PEV Program. If the settings do not match, the results will be rejected and the section shall be retested/reanalyzed with the appropriate settings.

The Engineer will use the results of the testing to evaluate paving methods and equipment. If the average profile index of a lot exceeds 635 mm/km (40.0 in./mile) for high-speed mainline pavement or 1025 mm/km (65.0 in./mile) for low-speed mainline pavement, the paving operation will be suspended until corrective action is taken by the Contractor.

- (e) Corrective Work. All bumps in excess of 8 mm (0.30 in.) in a length of 8 m (25 ft) or less shall be corrected. If the bump is greater than 13 mm (0.50 in.), the pavement shall be removed and replaced to the satisfaction of the Engineer at the Contractor's expense. The minimum length of pavement to be removed shall be 900 mm (3 ft).
- (1) High-Speed Mainline Pavement. Any subplot having a profile index within the range of, greater than 475 to 635 mm/km (30.0 to 40.0 in./mile) including bumps, shall be corrected to reduce the profile index to 475 mm/km (30.0 in./mile) or less on each trace. Any subplot having a profile index greater than 635 mm/km (40.0 in./mile) including bumps, shall be corrected to reduce the profile index to 475 mm/km (30.0 in./mile) or less on each trace, or replaced at the Contractor's option.
- (2) Low-Speed Mainline Pavement. Any subplot having a profile index within the range of, greater than 710 to 1025 mm/km (45.0 to 65.0 in./mile) including bumps, shall be corrected to reduce the profile index to 710 mm/km (45.0 in./mile) or less on each trace. Any subplot having a profile index greater than 1025 mm/km (65.0 in./mile) including bumps, shall be corrected to reduce the profile index to 710 mm/km (45.0 in./mile) or less on each trace, or replaced at the Contractor's option.
- (3) Miscellaneous Pavement. Surface variations which exceed the 10 mm (3/8 in.) tolerance will be marked by the Engineer and shall be corrected by the Contractor.

Corrective work shall be completed using either an approved grinding device consisting of multiple saws or by removing and replacing the pavement. Corrective work shall be applied to the full lane width. When completed, the corrected area shall have uniform texture and appearance, with the beginning and ending of the corrected area squared normal to the centerline of the paved surface.

Upon completion of the corrective work, the surface of the subplot(s) shall be retested. The Contractor shall furnish the profile tracing(s) and the completed form(s) to the Engineer within two working days after corrections are made. If the profile index and/or bumps still do not meet the requirements, additional corrective work shall be performed.

Corrective work shall be at the Contractor's expense.

- (f) Smoothness Assessments. Assessments will be paid to or deducted from the Contractor for each subplot of mainline pavement, per the Smoothness Assessment Schedule. Assessments will be based on the average profile index of each subplot prior to performing any corrective work unless the Contractor has chosen to remove and replace the subplot. For sublots that are replaced, assessments will be based on the profile index determined after replacement.

Assessments will not be paid or deducted until all other contract requirements for the pavement are satisfied. Pavement that is corrected or replaced for reasons other than smoothness, shall be retested as stated herein.

| SMOOTHNESS ASSESSMENT SCHEDULE (Bituminous Concrete Overlays)             |  |                           |
|---|--|---------------------------|
| High-Speed Mainline Pavement<br>Average Profile Index<br>mm/km (in./mile) | Low-Speed Mainline Pavement<br>Average Profile Index<br>mm/km (in./mile) | Assessment<br>per subplot |
| 95 (6.0) or less  | 240 (15.0) or less   | +\$150.00                 |
| >95 (6.0) to 160 (10.0)   | >240 (15.0) to 400 (25.0)  | +\$80.00                  |
| >160 (10.0) to 475 (30.0)   | >400 (25.0) to 710 (45.0)  | +\$0.00                   |
| >475 (30.0) to 635 (40.0)   | >710 (45.0) to 1025 (65.0)   | +\$0.00                   |
| Greater than 635 (40.0)   | Greater than 1025 (65.0)   | -\$300.00                 |

Smoothness assessments will not be applied to miscellaneous pavement sections.”

### Bituminous Concrete Pavement (Full-Depth)

Revise Article 407.09 of the Standard Specifications to read:

“**407.09 Surface Tests.** The finished surface of the pavement shall be tested for smoothness according to Article 406.21 except as follows:

Two wheel tracks shall be tested per lane. Testing shall be performed 1 m (3 ft) from and parallel to each lane edge.”

| SMOOTHNESS ASSESSMENT SCHEDULE (Full-Depth Bituminous)                    |  |                           |
|---|--|---------------------------|
| High-Speed Mainline Pavement<br>Average Profile Index<br>mm/km (in./mile) | Low-Speed Mainline Pavement<br>Average Profile Index<br>mm/km (in./mile) | Assessment<br>per subplot |
| 95 (6.0) or less  |  | +\$800.00                 |
| >95 (6.0) to 175 (11.0)   | 240 (15.0) or less   | +\$550.00                 |
| >175 (11.0) to 270 (17.0)   | >240 (15.0) to 400 (25.0)  | +\$350.00                 |
| >270 (17.0) to 475 (30.0)   | >400 (25.0) to 710 (45.0)  | +\$0.00                   |
| >475 (30.0) to 635 (40.0)   | >710 (45.0) to 1025 (65.0)   | +\$0.00                   |
| Greater than 635 (40.0)   | Greater than 1025 (65.0)   | -\$500.00                 |

Delete the fourth paragraph of Article 407.13 of the Standard Specifications.

### Portland Cement Concrete Pavement

Revise Article 420.12 of the Standard Specifications to read:

“**420.12 Surface Tests.** The finished surface of the pavement shall be tested for smoothness according to Article 406.21 except as follows:



The finished surface of the pavement shall be tested for smoothness once the pavement has attained a flexural strength of 3,800 kPa (550 psi) or a compressive strength of 20,700 kPa (3,000 psi).

Two wheel tracks shall be tested per lane. Testing shall be performed 1 m (3 ft) from and parallel to each lane edge.

Membrane curing damaged during testing shall be repaired as directed by the Engineer at the Contractor's expense.

No further texturing for skid resistance will be required for areas corrected by grinding. Protective coat shall be reapplied to ground areas according to Article 420.21 at the Contractor's expense.

For pavement that is corrected by removal and replacement, the minimum length to be removed shall meet the requirements of either Class A or Class B patching.

| SMOOTHNESS ASSESSMENT SCHEDULE (PCC)                                      |  |                           |
|---|--|---------------------------|
| High-Speed Mainline Pavement<br>Average Profile Index<br>mm/km (in./mile) | Low-Speed Mainline Pavement<br>Average Profile Index<br>mm/km (in./mile) | Assessment<br>per subplot |
| 95 (6.0) or less  |  | +\$1200.00                |
| >95 (6.0) to 175 (11.0)   | 240 (15.0) or less   | +\$950.00                 |
| >175 (11.0) to 270 (17.0)   | >240 (15.0) to 400 (25.0)  | +\$600.00                 |
| >270 (17.0) to 475 (30.0)   | >400 (25.0) to 710 (45.0)  | +\$0.00                   |
| >475 (30.0) to 635 (40.0)   | >710 (45.0) to 1025 (65.0)   | +\$0.00                   |
| Greater than 635 (40.0)   | Greater than 1025 (65.0)   | -\$750.00"                |

Delete the sixth paragraph of Article 420.23 of the Standard Specifications.

### Testing Equipment

Revise Article 1101.10 of the Standard Specifications to read:

**“1101.10 Pavement Surface Test Equipment.** Required surface testing and analysis equipment and their jobsite transportation shall be provided by the Contractor.

- (a) 5 m (16 ft) Straightedge. The 5 m (16 ft) straightedge shall consist of a metal I-beam mounted between two wheels spaced 5 m (16 ft) between the axles. Scratcher bolts which can be easily and accurately adjusted, shall be set at the 1/4, 1/2, and 3/4 points between the axles. A handle suitable for pushing and guiding shall be attached to the straightedge. The straightedge shall meet the approval of the Engineer.

(b) Profile Testing Device. The Profile Testing Device shall have a decal displayed to indicate it has been tested through the PEV Program administered by the Department.

(1) California Profilograph. The California Profilograph shall be either computerized or manual and have a frame 8 m (25 ft) in length supported upon multiple wheels at either end. The profile shall be recorded from the vertical movement of a wheel attached to the frame at mid point.

The California Profilograph shall be calibrated according to the manufacturer's recommendations and California Test 526. All calibration traces and calculations shall be submitted to the Engineer for the project file.

(2) Inertial Profiler. The inertial profiler shall be either an independent device or a system that can be attached to another vehicle using one or two non-contact sensors to measure the pavement profile. The inertial profiler shall be capable of performing a simulation of the California Profilograph to provide results in the Profile Index format.

The inertial profiler shall be calibrated according to the manufacturer's recommendations. All calibration traces and calculations shall be submitted to the Engineer for the project file.

(3) Trace Analysis. The Contractor shall reduce/evaluate these traces using a 0.0 mm (0.00 in.) blanking band and determine a Profile Index in mm/km (in./mile) for each section of finished pavement surface. Traces produced using a computerized profile testing device will be evaluated without further reduction. When using a manual profile testing device, the Contractor shall provide an electronic scanner, a computer, and software to reduce the trace. All analysis equipment (electronic scanner, computerized recorder, etc.) shall be able to accept 0.0 mm (0.00 in.) for the blanking band.

All traces from pavement sections tested with the profile testing device shall be recorded on paper with scales of 300:1 longitudinally and 1:1 vertically. Equipment and software settings of the profile testing device and analysis equipment shall be set to those values approved through the PEV Program.

The Engineer may retest the pavement at any time to verify the accuracy of the equipment."

80075

#### **SUSPENSION OF SLIPFORMED PARAPETS (BDE)**

Effective: June 11, 2004

The slipforming option, as stated in Article 503.17(e)(1) of the Standard Specifications will not be allowed on this project.

80145

**TEMPORARY CONCRETE BARRIER (BDE)**

Effective: October 1, 2002

Revised: November 1, 2003

Revise Section 704 of the Standard Specifications to read:

**“SECTION 704. TEMPORARY CONCRETE BARRIER**

**704.01 Description.** This work shall consist of furnishing, placing, maintaining, relocating and removing precast concrete barrier at temporary locations as shown on the plans or as directed by the Engineer.

**704.02 Materials.** Materials shall meet the requirements of the following Articles of Section 1000 - Materials:

| Item  | Article/Section |
|---|-----------------|
| (a) Portland Cement Concrete.....           | 1020            |
| (b) Reinforcement Bars (Note 1) .....       | 1006.10(a)(b)   |
| (c) Connecting Pins and Anchoring Pins..... | 1006.09         |
| (d) Connecting Loop Bars (Note 2)           |                 |
| (e) Rapid Set Mortar (Note 3)               |                 |

Note 1. Reinforcement bars shall be Grade 400 (Grade 60).

Note 2. Connecting loop bars shall be smooth bars conforming to the requirements of ASTM A 36.

Note 3. Rapid set materials shall be obtained from the Department’s approved list of Packaged, Dry, Rapid Hardening Cementitious Materials for Concrete Repairs. For a rapid set mortar mixture, one part packaged rapid set cement shall be combined with two parts fine aggregate, by volume or a packaged rapid set mortar shall be used. Mixing of the rapid set mortar shall be according to the manufacturer’s instructions.

**CONSTRUCTION REQUIREMENTS**

**704.03 General.** Precast concrete barrier produced after October 1, 2002 shall meet National Cooperative Highway Research Program (NCHRP) Report 350, Category 3, Test Level 3 requirements and have the F shape. Precast concrete barrier shall be constructed according to the Bureau of Materials and Physical Research’s Policy Memorandum “Quality Control/Quality Assurance Program for Precast Concrete Products”, applicable portions of Sections 504 and 1020, and to the details shown on the plans.

Precast units shall not be removed from the casting beds until a flexural strength of 2,000 kPa (300 psi) or a compressive strength of 10,000 kPa (1400 psi) is attained. When the concrete has attained a compressive strength according to Article 1020.04, and not prior to four days after casting, the units may be loaded, shipped and used.

**704.04 Installation.** F shape barrier units shall be seated on bare, clean pavement or paved shoulder and pinned together in a smooth, continuous line at the exact locations provided by the Engineer. The barrier unit at each end of the installation shall be secured to the pavement or paved shoulder using six anchoring pins and protected with an impact attenuator as shown on the plans.

F shape and New Jersey shape barrier units shall not be mixed in the same run.

Barrier units or attachments damaged during transportation or handling, or by traffic during the life of the installation, shall be repaired or replaced by the Contractor at his/her expense. The Engineer will be the sole judge in determining which units or attachments require repair or replacement.

The temporary barriers shall be removed when no longer required by the contract. After removal, all anchoring holes in the pavement or paved shoulder shall be filled with a rapid set mortar. Only enough water to permit placement and consolidation by rodding shall be used and the material shall be struck-off flush.

**704.05 New Jersey Shape Barrier.** New Jersey shape barrier produced prior to October 1, 2002 according to earlier Department standards, may be used until January 1, 2008.

Barrier units or attachments damaged during transportation or handling, or by traffic during the life of the installation, shall be repaired or replaced by the Contractor at his/her expense. The Engineer will be the sole judge in determining which units or attachments require repair or replacement.

F shape and New Jersey shape barrier units shall not be mixed in the same run.

The barrier unit at each end of the installation shall be secured to the pavement or paved shoulder using six dowel bars and protected with an impact attenuator as shown on the plans.

The temporary barriers shall be removed when no longer required by the contract. After removal, all anchoring holes in the pavement or paved shoulder shall be filled with a rapid set mortar. Only enough water to permit placement and consolidation by rodding shall be used and the material shall be struck-off flush.

**704.06 Method of Measurement.** Temporary concrete barrier will be measured for payment in meters (feet) in place along the centerline of the barrier. When temporary concrete barrier is relocated within the limits of the jobsite, the relocated barrier will be measured for payment in meters (feet) in place along the centerline of the barrier.

**704.07 Basis of Payment.** When the Contractor furnishes the barrier units, this work will be paid for at the contract unit price per meter (foot) for TEMPORARY CONCRETE BARRIER or RELOCATE TEMPORARY CONCRETE BARRIER.

When the Department furnishes the barrier units, this work will be paid for at the contract unit price per meter (foot) for TEMPORARY CONCRETE BARRIER, STATE OWNED or RELOCATE TEMPORARY CONCRETE BARRIER, STATE OWNED.

Impact attenuators will be paid for separately.”

80092

**TEMPORARY EROSION CONTROL (BDE)**

Effective: November 1, 2002

Revise the fifth sentence of the third paragraph of Article 280.04(a) of the Standard Specifications to read:

“This work may be constructed of hay or straw bales, extruded UV resistant high density polyethylene panels, erosion control blanket, mulch barrier, aggregate barriers, excavation, seeding, or mulch used separately or in combination, as approved, by the Engineer.”

Add the following paragraphs after the fifth paragraph of Article 280.04(a) of the Standard Specifications.

“A ditch check constructed of extruded, UV resistant, high density polyethylene panels, “M” pins and erosion control blanket shall consist of the following materials:

Extruded, UV resistant, high density polyethylene panels shall have a minimum height of 250 mm (10 in.) and minimum length of 1.0 m (39.4 in.). The panels shall have a 51 mm (2 in.) lip along the bottom of the panel. Each panel shall have a single rib thickness of 4 mm (5/32 in.) with a 12 mm (1/2 in.) distance between the ribs. The panels shall have an average apparent opening size equal to 4.75 mm (No. 4) sieve, with an average of 30 percent open area. The tensile strength of each panel shall be 26.27 kN/m (1800 lb/ft) in the machine direction and 7.3 kN/m (500 lb/ft) in the transverse direction when tested according to ASTM D 4595.

“M” pins shall be at least 76 mm (3 in.) by 686 mm (27 in.), constructed out of deformed grade C1008 D3.5 rod (0.211 in. diameter). The rod shall have a minimum tensile strength of 55 MPa (8000 psi).

Erosion control blanket shall conform to Article 251.04.

A section of erosion control blanket shall be placed transverse to the flowline direction of the ditch prior to the construction of the polyethylene ditch check. The length of the section shall extend from the top of one side of the ditch to the top of the opposite side of the ditch, while the width of the section shall be one roll width of the blanket. The upstream edge of the erosion control blanket shall be secured in a 100 mm (4 in.)

trench. The blanket shall be secured in the trench with 200 mm (8 in.) staples placed at 300 mm (1 ft) intervals along the edge before the trench is backfilled. Once the upstream edge of the blanket is secured, the downstream edge shall be secured with 200 mm (8 in.) staples placed at 300 mm (1 ft) intervals along the edge. The polyethylene ditch check shall be installed in the middle of the erosion control blanket, with the lip of each panel facing outward.

The ditch check shall consist of two panels placed back to back forming a single row. Placement of the first two panels shall be at the toe of the backslope or sideslope, with the panels extending across the bottom of the ditch. Subsequent panels shall extend both across the bottom of the ditch and up the opposite sideslope, as well as up the original backslope or sideslope at the distance determined by the Engineer.

The M pins shall be driven through the panel lips to secure the panels to the ground. M pins shall be installed in the center of the panels with adjacent panels overlapping the ends a minimum of 50 mm (2 in.). The pins shall be placed through both sets of panels at each overlap. They shall be installed at an interval of three M pins per one meter (39 in.) length of ditch check. The panels shall be wedged into the M pins at the top to ensure firm contact between the entire bottom of the panels and the soil."

80087

#### **TRAFFIC BARRIER TERMINALS (BDE)**

Effective: January 1, 2003

Revise Article 631.05 of the Standard Specifications to read:

**"631.05 Traffic Barrier Terminal, Type 5 and Type 5A.** The face of the guardrail shall be installed flush with the face of the bridge rail or parapet."

Revise Article 631.06 of the Standard Specifications to read:

**"631.06 Traffic Barrier Terminal, Type 6.** When attaching the end shoe to concrete constructed with forms and with a thickness of 300 mm (12 in.) or less, the holes may be formed, core drilled or an approved 20 mm (3/4 in.) cast-in-place insert may be used.

When attaching the end shoe to concrete constructed with forms and with a thickness greater than 300 mm (12 in.), an approved M20 (3/4 in.) bolt with an approved expansion device may be used in lieu of formed or core drilled holes.

When attaching the end shoe to concrete constructed by slipforming, the holes shall be core drilled.

The tapered, parapet, wood block out shall be used on all appurtenances with a sloped face.

When no bridge approach curb is present, Type B concrete curb shall be constructed as shown on the plans according to Section 606.”

Revise Article 631.07 of the Standard Specifications to read:

“**631.07 Traffic Barrier Terminal, Type 6B.** Attachment of the end shoe to concrete shall be according to Article 631.06 except the tapered, parapet, wood block out will not be required.”

Delete the third and fourth paragraphs of Article 631.11 of the Standard Specifications.

Add the following paragraph to the end of Article 631.11 of the Standard Specifications:

“Construction of the Type B concrete curb for TRAFFIC BARRIER TERMINAL, TYPE 6 will be paid for according to Article 606.14.”

80098

#### **TRAFFIC CONTROL DEFICIENCY DEDUCTION (BDE)**

Effective: April 1, 1992

Revised: January 1, 2005

To ensure a prompt response to incidents involving the integrity of work zone traffic control, the Contractor shall provide a telephone number where a responsible individual can be contacted 24 hours-a-day.

When the Engineer is notified, or determines a traffic control deficiency exists, he/she will notify and direct the Contractor to correct the deficiency within a specified time. The specified time, which begins upon notification to the Contractor, will be from 1/2 hour to 12 hours based upon the urgency of the situation and the nature of the deficiency. The Engineer shall be the sole judge.

A deficiency may be any lack of repair, maintenance, or non-compliance with the traffic control plan. A deficiency may also be applied to situations where corrective action is not an option such as the use of non-certified flaggers for short term operations; working with lane closures beyond the time allowed in the contract; or failure to perform required contract obligations such as traffic control surveillance.

If the Contractor fails to correct a deficiency within the specified time, a daily monetary deduction will be imposed for each calendar day or fraction thereof the deficiency exists. The calendar day(s) will begin with notification to the Contractor and end with the Engineer's acceptance of the correction. The daily monetary deduction will be either \$1,000 or 0.05 percent of the awarded contract value, whichever is greater. For those deficiencies where corrective action was not an option this monetary deduction will be immediate.

In addition, if the Contractor fails to respond, the Engineer may correct the deficiency and the cost thereof will be deducted from monies due or which may become due the Contractor. This corrective action will in no way relieve the Contractor of his/her contractual requirements or responsibilities.

5729I

## **TRAINING SPECIAL PROVISIONS**

This Training Special Provision supersedes Section 7b of the Special Provision entitled "Specific Equal Employment Opportunity Responsibilities," and is in implementation of 23 U.S.C. 140(a).

As part of the contractor's equal employment opportunity affirmative action program, training shall be provided as follows:

The contractor shall provide on-the-job training aimed at developing full journeyman in the type of trade or job classification involved. The number of trainees to be trained under this contract will be 6. In the event the contractor subcontracts a portion of the contract work, he shall determine how many, if any, of the trainees are to be trained by the subcontractor, provided however, that the contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The contractor shall also insure that this Training Special Provision is made applicable to such subcontract. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.

The number of trainees shall be distributed among the work classifications on the basis of the contractor's needs and the availability of journeymen in the various classifications within the reasonable area of recruitment. Prior to commencing construction, the contractor shall submit to the Illinois Department of Transportation for approval the number of trainees to be trained in each selected classification and training program to be used. Furthermore, the contractor shall specify the starting time for training in each of the classifications. The contractor will be credited for each trainee employed by him on the contract work who is currently enrolled or becomes enrolled in an approved program and will be reimbursed for such trainees as provided hereinafter.

Training and upgrading of minorities and women toward journeyman status is a primary objective of this Training Special Provision. Accordingly, the contractor shall make every effort to enroll minority trainees and women (e.g. by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent such persons are available within a reasonable area of recruitment. The contractor will be responsible for demonstrating the steps that he has taken in pursuance thereof, prior to a determination as to whether the contractor is in compliance with this Training Special Provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.



No employee shall be employed as a trainee in any classification in which he has successfully completed a training course leading to journeyman status or in which he has been employed as a journeyman. The contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used the contractor's records should document the findings in each case.

The minimum length and type of training for each classification will be as established in the training program selected by the contractor and approved by the Illinois Department of Transportation and the Federal Highway Administration. The Illinois Department of Transportation and the Federal Highway Administration shall approve a program, if it is reasonably calculated to meet the equal employment opportunity obligations of the contractor and to qualify the average trainee for journeyman status in the classification concerned by the end of the training period. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved by not necessarily sponsored by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training shall also be considered acceptable provided it is being administered in a manner consistent with the equal employment obligations of Federal-aid highway construction contracts. Approval or acceptance of a training program shall be obtained from the State prior to commencing work on the classification covered by the program. It is the intention of these provisions that training is to be provided in the construction crafts rather than clerk-typists or secretarial-type positions. Training is permissible in lower level management positions such as office engineers, estimators, timekeepers, etc., where the training is oriented toward construction applications. Training in the laborer classification may be permitted provided that significant and meaningful training is provided and approved by the Illinois Department of Transportation and the Federal Highway Administration. Some offsite training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

Except as otherwise noted below, the contractor will be reimbursed 80 cents per hour of training given an employee on this contract in accordance with an approved training program. As approved by the Engineer, reimbursement will be made for training of persons in excess of the number specified herein. This reimbursement will be made even though the contractor receives additional training program funds from other sources, provided such other source does not specifically prohibit the contractor from receiving other reimbursement. Reimbursement for offsite training indicated above may only be made to the contractor where he does one or more of the following and the trainees are concurrently employed on a Federal-aid project; contributes to the cost of the training, provides the instruction to the trainee or pays the trainee's wages during the offsite training period.

No payment shall be made to the contractor if either the failure to provide the required training, or the failure to hire the trainee as a journeyman, is caused by the contractor and evidences a lack of good faith on the part of the contractor in meeting the requirement of this Training Special Provision. It is normally expected that a trainee will begin his training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project as long as training opportunities exist in his work classification or until he has completed his training program.

It is not required that all trainees be on board for the entire length of the contract. A contractor will have fulfilled his responsibilities under this Training Special Provision if he has provided acceptable training to the number of trainees specified. The number trained shall be determined on the basis of the total number enrolled on the contract for a significant period.

Trainees will be paid at least 60 percent of the appropriate minimum journeyman's rate specified in the contract for the first half of the training period, 75 percent for the third quarter of the training period, and 90 percent for the last quarter of the training period, unless apprentices or trainees in an approved existing program are enrolled as trainees on this project. In that case, the appropriate rates approved by the Departments of Labor or Transportation in connection with the existing program shall apply to all trainees being trained for the same classification who are covered by this Training Special Provision.

The contractor shall furnish the trainee a copy of the program he will follow in providing the training. The contractor shall provide each trainee with a certification showing the type and length of training satisfactorily complete.

The contractor will provide for the maintenance of records and furnish periodic reports documenting his performance under this Training Special Provision.

METHOD OF MEASUREMENT The unit of measurement is in hours.

BASIS OF PAYMENT This work will be paid for at the contract unit price of 80 cents per hour for TRAINEES. The estimated total number of hours, unit price and total price have been included in the schedule of prices.

20338

**TRUCK BED RELEASE AGENT (BDE)**

Effective: April 1, 2004

Add the following sentence after the third sentence of the first paragraph of Article 406.14 of the Standard Specifications.

"In addition to the release agent, the Contractor may use a light scatter of manufactured sand (FA 20 or FA 21) evenly distributed over the bed of the vehicle."

80123

**WEIGHT CONTROL DEFICIENCY DEDUCTION**

Effective: April 1, 2001

Revised: August 1, 2002

The Contractor shall provide accurate weights of materials delivered to the contract for incorporation into the work (whether temporary or permanent) and for which the basis of payment is by weight. These weights shall be documented on delivery tickets which shall identify the source of the material, type of material, the date and time the material was loaded,

the contract number, the net weight, the tare weight when applicable and the identification of the transporting vehicle. For aggregates, the Contractor shall have the driver of the vehicle furnish or establish an acceptable alternative to provide the contract number and a copy of the material order to the source for each load. The source is defined as that facility that produces the final material product that is to be incorporated into the contract pay items.

The Department will conduct random, independent vehicle weight checks for material sources according to the procedures outlined in the Documentation Section Policy Statement of the Department's Construction Manual and hereby incorporated by reference. The results of the independent weight checks shall be applicable to all contracts containing this Special Provision. Should the vehicle weight check for a source result in the net weight of material on the vehicle exceeding the net weight of material shown on the delivery ticket by 0.50% (0.70% for aggregates) or more, the Engineer will document the independent vehicle weight check and immediately furnish a copy of the results to the Contractor. No adjustment in pay quantity will be made. Should the vehicle weight check for a source result in the net weight of material shown on the delivery ticket exceeding the net weight of material on the vehicle by 0.50% (0.70% for aggregates) or more, the Engineer will document the independent vehicle weight check and immediately furnish a copy of the results to the Contractor. The Engineer will adjust the net weight shown on the delivery ticket to the checked delivered net weight as determined by the independent vehicle weight check.

The Engineer will also adjust the method of measurement for all contracts for subsequent deliveries of all materials from the source based on the independent weight check. The net weight of all materials delivered to all contracts containing this Special Provision from this source, for which the basis of payment is by weight, will be adjusted by applying a correction factor "A" as determined by the following formula:

$$A = 1.0 - \left( \frac{B - C}{B} \right); \text{ Where } A \leq 1.0; \left( \frac{B - C}{C} \right) > 0.50\% \text{ (0.70\% for aggregates)}$$

Where A = Adjustment factor  
B = Net weight shown on delivery ticket  
C = Net weight determined from independent weight check

The adjustment factor will be applied as follows:

$$\text{Adjusted Net Weight} = A \times \text{Delivery Ticket Net Weight}$$

The adjustment factor will be imposed until the cause of the deficient weight is identified and corrected by the Contractor to the satisfaction of the Engineer. If the cause of the deficient weight is not identified and corrected within seven (7) calendar days, the source shall cease delivery of all materials to all contracts containing this Special Provision for which the basis of payment is by weight.

Should the Contractor elect to challenge the results of the independent weight check, the Engineer will continue to document the weight of material for which the adjustment factor would be applied. However, provided the Contractor furnishes the Engineer with written documentation that the source scale has been calibrated within seven (7) calendar days after the date of the independent weight check, adjustments in the weight of material paid for will not be applied unless the scale calibration demonstrates that the source scale was not within the specified Department of Agriculture tolerance.

At the Contractor's option, the vehicle may be weighed on a second independent Department of Agriculture certified scale to verify the accuracy of the scale used for the independent weight check.

80048

### **WORK ZONE SPEED LIMIT SIGNS (BDE)**

Effective: April 2, 2004

Revised: January 1, 2006

Delete Article 702.05(c).

Revise Article 702.05(d) to read:

“(d) Work Zone Speed Limit Signs. Work zone speed limit sign assemblies shall be provided and located as shown on the plans. Two additional assemblies shall be placed 150 m (500 ft) beyond the last entrance ramp for each interchange or sideroad. The individual signs that make up an assembly may be combined on a single panel. The sheeting for the signs shall be reflective and conform to the requirements of Article 1084.02.

All permanent “SPEED LIMIT” signs located within the work zone shall be removed or covered. This work shall be coordinated with the lane closure(s) by promptly establishing a reduced posted speed zone when the lane closure(s) are put into effect and promptly reinstating the posted speed zone when the lane closure(s) are removed.

The work zone speed limit signs and end work zone speed limit signs shown in advance of and at the end of the lane closure(s) shall be used for the entire duration of the closure(s).

The work zone speed limit signs shown within the lane closure(s) shall only be used when workers are present in the closed lane adjacent to traffic; at all other times, the signs shall be promptly removed or covered. The sign assemblies shown within the lane closure(s) will not be required when the worker(s) are located behind a concrete barrier wall.

80125

**WORK ZONE TRAFFIC CONTROL DEVICES (BDE)**

Effective: January 1, 2003

Revised: November 1, 2004

Add the following to Article 702.01 of the Standard Specifications:

“All devices and combinations of devices shall meet the requirements of the National Cooperative Highway Research Program (NCHRP) Report 350 for their respective categories. The categories are as follows:

Category 1 includes small, lightweight, channelizing and delineating devices that have been in common use for many years and are known to be crashworthy by crash testing of similar devices or years of demonstrable safe performance. These include cones, tubular markers, flexible delineators and plastic drums with no attachments. Category 1 devices shall be crash tested and accepted or may be self-certified by the manufacturer.

Category 2 includes devices that are not expected to produce significant vehicular velocity change but may otherwise be hazardous. These include drums and vertical panels with lights, barricades and portable sign supports. Category 2 devices shall be crash tested and accepted for Test Level 3.

Category 3 includes devices that are expected to cause significant velocity changes or other potentially harmful reactions to impacting vehicles. These include crash cushions, truck mounted attenuators and other devices not meeting the definitions of Category 1 or 2. Category 3 devices shall be crash tested and accepted for either Test Level 3 or the test level specified.

Category 4 includes portable or trailer-mounted devices such as arrow boards, changeable message signs, temporary traffic signals and area lighting supports. Currently, there is no implementation date set for this category and it is exempt from the NCHRP 350 compliance requirement.

The Contractor shall provide a manufacturer’s self-certification letter for each Category 1 device and an FHWA acceptance letter for each Category 2 and Category 3 device used on the contract. The letters shall state the device meets the NCHRP 350 requirements for its respective category and test level, and shall include a detail drawing of the device.”

Delete the third, fourth and fifth paragraphs of Article 702.03(b) of the Standard Specifications.

Delete the third sentence of the first paragraph of Article 702.03(c) of the Standard Specifications.

Revise the first sentence of the first paragraph of Article 702.03(e) of the Standard Specifications to read:

“Drums shall be nonmetallic and have alternating reflectorized Type AA or Type AP fluorescent orange and reflectorized white horizontal, circumferential stripes.”

Add the following to Article 702.03 of the Standard Specifications:

“(h) Vertical Barricades. Vertical barricades may be used in lieu of cones, drums or Type II barricades to channelize traffic.”

Delete the fourth paragraph of Article 702.05(a) of the Standard Specifications.

Revise the sixth paragraph of Article 702.05(a) of the Standard Specifications to read:

“When the work operations exceed four days, all signs shall be post mounted unless the signs are located on the pavement or define a moving or intermittent operation. When approved by the Engineer, a temporary sign stand may be used to support a sign at 1.2 m (5 ft) minimum where posts are impractical. Longitudinal dimensions shown on the plans for the placement of signs may be increased up to 30 m (100 ft) to avoid obstacles, hazards or to improve sight distance, when approved by the Engineer. “ROAD CONSTRUCTION AHEAD” signs will also be required on side roads located within the limits of the mainline “ROAD CONSTRUCTION AHEAD” signs.”

Delete all references to “Type 1A barricades” and “wing barricades” throughout Section 702 of the Standard Specifications.

80097

### **STEEL COST ADJUSTMENT (BDE)**

Effective: April 2, 2004

Revised: July 1, 2004

Description. At the bidder’s option, a steel cost adjustment will be made to provide additional compensation to the Contractor or a credit to the Department for fluctuations in steel prices. The bidder must indicate on the attached form whether or not steel cost adjustments will be part of this contract. This attached form shall be submitted with the bid. Failure to submit the form shall make this contract exempt of steel cost adjustments.

Types of Steel Products. An adjustment will be made for fluctuations in the cost of steel used in the manufacture of the following items:

- Metal Piling (excluding temporary sheet piling)
- Structural Steel
- Reinforcing Steel

Other steel materials such as dowel bars, tie bars, mesh reinforcement, guardrail, steel traffic signal and light poles, towers and mast arms, metal railings (excluding wire fence), frames and grates, and other miscellaneous items will be subject to a steel cost adjustment when the pay item they are used in has a contract value of \$10,000 or greater.

Documentation. Sufficient documentation shall be furnished to the Engineer to verify the following:

- (a) Evidence that increased or decreased steel costs have been passed on to the Contractor.
- (b) The dates and quantity of steel, in kg (lb), shipped from the mill to the fabricator.
- (c) The quantity of steel, in kg (lb), incorporated into the various items of work covered by this special provision. The Department reserves the right to verify submitted quantities.

Method of Adjustment. Steel cost adjustments will be computed as follows:

$$SCA = Q \times D$$

Where: SCA = steel cost adjustment, in dollars  
Q = quantity of steel incorporated into the work, in kg (lb)  
D = price factor, in dollars per kg (lb)

$$D = CBP_M - CBP_L$$

Where:  $CBP_M$  = The average of the Consumer Buying Price indices for Shredded Auto Scrap (Chicago) and No. 1 Heavy Melt (Chicago) as published by the American Metal Market (AMM) for the day the steel is shipped from the mill. The indices will be converted from dollars per ton to dollars per kg (lb).

$CBP_L$  = The average of the Consumer Buying Price indices for Shredded Auto Scrap (Chicago) and No. 1 Heavy Melt (Chicago) as published by the AMM for the day the contract is let. The indices will be converted from dollars per ton to dollars per kg (lb).

The unit masses (weights) of steel that will be used to calculate the steel cost adjustment for the various items are shown in the attached table.

No steel cost adjustment will be made for any products manufactured from steel having a mill shipping date prior to the letting date.

If the Contractor fails to provide the required documentation, the method of adjustment will be calculated as described above; however, the  $CBP_M$  will be based on the date the steel arrives at the job site. In this case, an adjustment will only be made when there is a decrease in steel costs.

Basis of Payment. Steel cost adjustments may be positive or negative but will only be made when there is a difference between the  $CBP_L$  and  $CBP_M$  in excess of five percent, as calculated by:

$$\text{Percent Difference} = \{(CBP_L - CBP_M) \div CBP_L\} \times 100$$

Steel cost adjustments will be calculated by the Engineer and will be paid or deducted when all other contract requirements for the steel items are satisfied. Adjustments will only be made for fluctuations in the cost of the steel as described herein. No adjustment will be made for changes in the cost of manufacturing, fabrication, shipping, storage, etc.

**Attachment**

| Item  | Unit Mass (Weight)            |
|---|-------------------------------|
| Metal Piling (excluding temporary sheet piling)                                   |                               |
| Furnishing Metal Pile Shells 305 mm (12 in.), 3.80 mm (0.179 in.) wall thickness) | 34 kg/m (23 lb/ft)            |
| Furnishing Metal Pile Shells 305 mm (12 in.), 6.35 mm (0.250 in.) wall thickness) | 48 kg/m (32 lb/ft)            |
| Furnishing Metal Pile Shells 356 mm (14 in.), 6.35 mm (0.250 in.) wall thickness) | 55 kg/m (37 lb/ft)            |
| Other piling  | See plans                     |
| Structural Steel  | See plans for weights         |
| Reinforcing Steel   | See plans for weights         |
| Dowel Bars and Tie Bars   | 3 kg (6 lb) each              |
| Mesh Reinforcement  | 310 kg/sq m (63 lb/100 sq ft) |
| Guardrail   |                               |
| Steel Plate Beam Guardrail, Type A w/steel posts                                  | 30 kg/m (20 lb/ft)            |
| Steel Plate Beam Guardrail, Type B w/steel posts                                  | 45 kg/m (30 lb/ft)            |
| Steel Plate Beam Guardrail, Types A and B w/wood posts                            | 12 kg/m (8 lb/ft)             |
| Steel Plate Beam Guardrail, Type 2  | 140 kg (305 lb) each          |
| Steel Plate Beam Guardrail, Type 6  | 570 kg (1260 lb) each         |
| Traffic Barrier Terminal, Type 1 Special (Tangent)                                | 330 kg (730 lb) each          |
| Traffic Barrier Terminal, Type 1 Special (Flared)                                 | 185 kg (410 lb) each          |
| Steel Traffic Signal and Light Poles, Towers and Mast Arms                        |                               |
| Traffic Signal Post   | 16 kg/m (11 lb/ft)            |
| Light Pole, Tenon Mount and Twin Mount, 9 m – 12 m (30 - 40 ft)                   | 21 kg/m (14 lb/ft)            |
| Light Pole, Tenon Mount and Twin Mount, 13.5 m – 16.5 m (45 - 55 ft)              | 31 kg/m (21 lb/ft)            |
| Light Pole w/Mast Arm, 9 m – 15.2 m (30 - 50 ft)                                  | 19 kg/m (13 lb/ft)            |
| Light Pole w/Mast Arm, 16.5 m – 18 m (55 - 60 ft)                                 | 28 kg/m (19 lb/ft)            |
| Light Tower w/Luminaire Mount, 24 m – 33.5 m (80 - 110 ft)                        | 46 kg/m (31 lb/ft)            |
| Light Tower w/Luminaire Mount, 36.5 m – 42.5 m (120 - 140 ft)                     | 97 kg/m (65 lb/ft)            |
| Light Tower w/Luminaire Mount, 45.5 m – 48.5 m (150 - 160 ft)                     | 119 kg/m (80 lb/ft)           |
| Metal Railings (excluding wire fence)   |                               |
| Steel Railing, Type SM  | 95 kg/m (64 lb/ft)            |
| Steel Railing, Type S-1   | 58 kg/m (39 lb/ft)            |
| Steel Railing, Type T-1   | 79 kg/m (53 lb/ft)            |
| Steel Bridge Rail   | 77 kg/m (52 lb/ft)            |
| Frames and Grates   |                               |
| Frame   | 115 kg (250 lb)               |
| Lids and Grates   | 70 kg (150 lb)                |



**RETURN WITH BID**

**ILLINOIS DEPARTMENT  
OF TRANSPORTATION**

**OPTION FOR  
STEEL COST ADJUSTMENT**

The bidder shall submit this form with his/her bid. Failure to submit the form shall make this contract exempt of steel cost adjustments. After award, this form, when submitted shall become part of the contract.

**Contract No.:** \_\_\_\_\_

**Company Name:** \_\_\_\_\_

**Contractor's Option:**

Is your company opting to include this special provision as part of the contract plans?

Yes  No

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

80127

## **CLEANING AND PAINTING NEW METAL STRUCTURES**

Effective Date: September 13, 1994

Revised Date: June 27, 2005

Description. The material and construction requirements that apply to cleaning and painting new structural steel shall be according to the applicable portion of Sections 506 of the Standard Specifications except as modified herein. The three coat paint system shall be the system as specified on the plans and as defined herein.

Materials. All materials to be used on an individual structure shall be produced by the same manufacturer. The Bureau of Materials and Physical Research has established a list of all products that have met preliminary requirements. Each batch of material must be tested and approved by that bureau before use.

The paint materials shall meet the requirements of the following articles of the Standard Specification:

| <u>Item</u>                           | <u>Article</u> |
|---------------------------------------|----------------|
| (a) Inorganic Zinc-Rich Primer        | 1008.22        |
| (b) Waterborne Acrylic                | 1008.24        |
| (c) Aluminum Epoxy Mastic             | 1008.25        |
| (d) Organic Zinc-Rich Primer (Note 1) |                |
| (e) Epoxy Intermediate (Note 1)       |                |
| (f) Aliphatic Urethane (Note 1)       |                |

Note 1: These material requirements shall be according to the Special Provision for the Organic Zinc-Rich Paint System.

Submittals. At least 30 days prior to beginning field painting, the Contractor shall submit for the Engineer's review and acceptance, the following applicable plans, certifications and information for completing the field work. Field painting can not proceed until the submittals are accepted by the Engineer. Qualifications, certifications and QC plans for shop cleaning and painting shall be available for review by the QA Inspector.

- a) Contractor/Personnel Qualifications. Except for miscellaneous steel items such as bearings, side retainers, expansion joint devices, and other items allowed by the Engineer, or unless stated otherwise in the contract, the shop painting Contractors shall be certified to perform the work as follows: the shop painting Contractor shall possess AISC Sophisticated Paint Endorsement or SSPC-QP3 certification. Evidence of current qualifications shall be provided.

Personnel managing the shop and field Quality Control program(s) for this work shall possess a minimum classification as a National Association of Corrosion Engineers (NACE) Coating Inspector Technician, or shall provide evidence of successful inspection of 3 projects of similar or greater complexity and scope that have been completed in the last 2 years. Copies of the certification and/or experience shall be provided.

The personnel performing the QC tests for this work shall be trained in coatings inspection and the use of the testing instruments. Documentation of training shall be provided.

- b) Quality Control (QC) Program. The shop and field QC Programs shall identify the following; the instrumentation that will be used, a schedule of required measurements and observations, procedures for correcting unacceptable work, and procedures for improving surface preparation and painting quality as a result of quality control findings. The field program shall incorporate the IDOT Quality Control Daily Report form, as supplied by the Engineer.
- c) Field Cleaning and Painting Inspection Access Plan. The inspection access plan for use by Contractor QC personnel for ongoing inspections and by the Engineer during Quality Assurance (QA) observations.
- d) Surface Preparation/Painting Plan. The surface preparation/painting plan shall include the methods of surface preparation and type of equipment to be utilized for solvent cleaning, abrasive blast cleaning, washing, and power tool cleaning. The plan shall include the manufacturer's names of the materials that will be used, including Product Data Sheets and Material Safety Data Sheets (MSDS).

A letter or written instructions from the coating manufacturer shall be included, indicating the required drying time for each coat at the minimum, normal, and maximum application temperatures before the coating can be exposed to temperatures or moisture conditions that are outside of the published application parameters.

Field Quality Control (QC) Inspections. The Contractor shall perform first line, in process QC inspections of each phase of the work. The Contractor shall implement the submitted and accepted QC Program to insure that the work accomplished complies with these specifications. The Contractor shall use the IDOT Quality Control Daily Report form supplied by the Engineer to record the results of quality control tests. The completed reports shall be turned into the Engineer before work resumes the following day.

The Contractor shall have available at the shop or on the field site, all of the necessary inspection and testing equipment. The equipment shall be available for the Engineer's use when requested.

Field Quality Assurance (QA) Observations. The Engineer will conduct QA observations of any or all phases of the work. The Engineer's observations in no way relieve the Contractor of the responsibility to provide all necessary daily QC inspections of his/her own and to comply with all requirements of this Specification.

The Engineer has the right to reject any work that was performed without adequate provision for QA observations.

The Engineer will issue a Non-Conformance Report when cleaning and painting work is found to be in violation of the specification requirements, and is not corrected to bring it into compliance before proceeding with the next phase of work.

**Inspection Access and Lighting.** The Contractor shall facilitate the Engineer's observations as required, including allowing ample time to view the work. The Contractor shall furnish, erect and move scaffolding or other mechanical equipment to permit close observation of all surfaces to be cleaned and painted. This equipment shall be provided during all phases of the work. Examples of acceptable access structures include:

- Mechanical lifting equipment, such as, scissor trucks, hydraulic booms, etc.
- Platforms suspended from the structure comprised of trusses or other stiff supporting members and including rails and kick boards.
- Simple catenary supports are permitted only if independent life lines for attaching a fall arrest system according to Occupational Safety and Health Administration (OSHA) regulations are provided.

When the surface to be inspected is more than 1.8 m (6 ft) above the ground or water surface, the Contractor shall provide the Engineer with a safety harness and a lifeline according to OSHA regulations. The lifeline and attachment shall not direct the fall into oncoming traffic. The Contractor shall provide a method of attaching the lifeline to the structure independent of the inspection facility or any support of the platform. When the inspection facility is more than 800 mm (2 1/2 ft) above the ground, the Contractor shall provide an approved means of access onto the platform.

The Contractor shall provide artificial lighting in areas where natural light is inadequate, as determined by the Engineer, to allow proper cleaning, inspection, and painting. Illumination for inspection shall be at least 325 LUX (30 foot candles). Illumination for cleaning and painting, including the working platforms, access, and entryways shall be at least 215 LUX (20 foot candles).

**Construction Requirements.** The Contractor shall be responsible for any damage caused to persons, vehicles, or property, except as indemnified by the Response Action Contractor Indemnification Act. Whenever the intended purposes of the protective devices are not being accomplished, as determined by the Engineer, work shall be immediately suspended until corrections are made. Painted surfaces damaged by any Contractor's operation shall be removed and repainted, as directed by the Engineer, at the Contractor's expense.

The Contractor shall comply with the provisions of the Illinois Environmental Protection Act. Paint drips, spills, and overspray are not permitted to escape into the air or onto any other surfaces or surrounding property not intended to be painted. Containment shall be used to control paint drips, spills, and overspray, and shall be dropped and all equipment secured when sustained wind speeds of 64 kph (40 mph) or greater occur, unless the containment design necessitates action at lower wind speeds. The contractor shall evaluate project-specific conditions to determine the specific type and extent of containment needed to control the paint emissions and shall submit a plan for containing or controlling paint debris (droplets, spills, overspray, etc.) to the Engineer for approval prior to starting the work. Approval shall not relieve the Contractor of their ultimate responsibility for controlling paint debris from escaping the work zone.

Surface and Weather Conditions. Surfaces to be painted after cleaning shall remain free of moisture and other contaminants. The Contractor shall control his/her operations to insure that dust, dirt, or moisture does not come in contact with surfaces cleaned or painted that day.

The surface temperature shall be at least 3°C (5°F) above the dew point during final surface preparation operations. The paint manufacturers' published literature shall be followed for specific temperature, dew point, and humidity restrictions during the application of each coat.

The Contractor shall monitor temperature, dew point, and humidity every 4 hours during surface preparation and coating application in the specific areas where the work is being performed. The frequency of monitoring shall increase if weather conditions are changing. The Engineer has the right to reject any work that was performed under unfavorable weather conditions. Rejected work shall be removed, recleaned, and repainted at the Contractor's expense.

Seasonal Restrictions on Field Cleaning and Painting. Field cleaning and painting work shall be accomplished between April 15 and October 31 unless authorized otherwise by the Engineer in writing.

**Inorganic Zinc-rich/ Waterborne Acrylic Paint system.** This system shall be for shop and field application of the coating system, shop application of the intermediate and top coats will not be allowed.

In the shop, all structural steel designated to be painted shall be given one coat of inorganic zinc rich primer. In the field, before the application of the intermediate coat, the prime coat and any newly installed fasteners shall be spot solvent cleaned per SSPC-SP 1 and all surfaces pressure washed to remove dirt, oil, lubricants, oxidation products, and foreign substances. Washing shall involve the use of potable water at a pressure between 7 MPa (1000 psi) and 34 MPa (5000 psi) and according to "Low Pressure Water Cleaning" of SSPC-SP12. Paint spray equipment shall not be used to perform the water cleaning. All damaged shop primed areas shall then be spot cleaned per SSPC-SP3 and spot primed with aluminum epoxy mastic. The structural steel shall then receive one full intermediate coat and one full topcoat of waterborne acrylic paint.

- a) Paint drips, spills, and overspray must be controlled. If containment is used to control paint drips, spills, and overspray, the containment shall be dropped and all equipment secured when sustained wind speeds of 64 kph (40 mph) or greater occur. When the protective coverings need to be attached to the structure, they shall be attached by bolting, clamping, or similar means. Welding or drilling into the structure is prohibited unless approved by the Engineer in writing.
- b) Coating Dry Film Thickness (dft), measured according to SSPC-PA2:
  - Zinc Primer: 75 microns (3 mils) min., 150 microns (6 mils) max.
  - Epoxy Mastic: 125 microns (5 mils) min., 180 microns (7 mils) max.
  - Intermediate Coat: 50 microns (2 mils) min., 100 microns (4 mils) max.
  - Topcoat: 50 microns (2 mils) min., 100 microns (4 mils) max.

The total dry film thickness, excluding the spot areas touched up with epoxy mastic, shall be between 180 and 355 microns (7 and 14 mils).

- c) The pressure washing requirement above may be waived if the QC and QA Inspectors verify the primed surfaces have not been contaminated.
- d) Damage to the paint system shall be spot cleaned using SSPC-SP3. The cleaned areas shall be spot painted with a penetrating sealer as recommended by the manufacturer, which shall overlap onto the existing topcoat. Then the aluminum epoxy mastic shall be spot applied not to go beyond the area painted with the sealer. The acrylic intermediate and topcoat shall be spot applied to the mastic with at least a 150 mm (6 inch) overlap onto the existing topcoat.

**Organic Zinc-Rich/ Epoxy/ Urethane Paint System.** This system shall be for full shop application of the coating system, all contact surfaces shall be masked off prior to application of the intermediate and top coats.

Additional Surface Preparation. In addition to the requirements of Section 3.2.9 of the AASHTO/AWS D1.5M/D1.5:2002 Bridge Welding Code (breaking thermal cut corners of stress carrying members), rolled and thermal cut corners to be painted with organic zinc primer shall be broken if they are sharper than a 1.5 mm (1/16 in.) radius. Corners shall be broken by a single pass of a grinder or other suitable device at a 45° angle to each adjoining surface prior to final blast cleaning, so the resulting corner approximates a 1.5 mm (1/16 in.) or larger radius after blasting. Surface anomalies (burrs, fins, deformations) shall also be treated to meet this criteria before priming.

In the shop, all structural steel designated to be painted shall be given one coat of organic zinc rich primer. Before the application of the intermediate coat, the prime coat and any newly installed fasteners shall be spot solvent cleaned per SSPC-SP 1 and all surfaces pressure washed to remove dirt, oil, lubricants, oxidation products, and foreign substances. Washing shall involve the use of potable water at a pressure between 7 MPa (1000 psi) and 34 MPa (5000 psi) and according to “Low Pressure Water Cleaning” of SSPC-SP12. Paint spray equipment shall not be used to perform the water cleaning. All damaged shop primed areas shall then be spot cleaned per SSPC-SP3, and the structural steel shall then receive one full intermediate coat of epoxy and one full topcoat of aliphatic urethane.

- (a) Paint drips, spills, and overspray must be controlled. If containment is used to control paint drips, spills, and overspray, the containment shall be dropped and all equipment secured when sustained wind speeds of 64 kph (40 mph) or greater occur. When the protective coverings need to be attached to the structure, they shall be attached by bolting, clamping, or similar means. Welding or drilling into the structure is prohibited unless approved by the Engineer in writing.
- (b) Coating Dry Film Thickness (dft), measured according to SSPC-PA2:
  - organic Zinc Primer: 75 microns (3 mils) min., 125 microns (5 mils) max.
  - Aluminum Epoxy Mastic: 125 microns (5 mils) min., 180 microns (7 mils) max.
  - Epoxy Intermediate Coat: 75 microns (3 mils) min., 150 microns (6 mils) max.
  - Aliphatic Urethane Top Coat: 65 microns (2.5 mils) min., 100 microns (4 mils) max.

- (c) The total dry film thickness, excluding the spot areas touched up with epoxy mastic, shall be between 215 and 375 microns (8.5 and 15 mils).
- (d) When specified on the plans or as requested by the Contractor, and approved by the Engineer, the epoxy intermediate and aliphatic urethane top coats shall be applied in the shop. All faying surfaces of field connections shall be masked off after priming and shall not receive the intermediate or top coats in the shop. The intermediate and top coats for field connections shall be applied, in the field, after erection of the structural steel is completed. The pressure washing requirement above may be waived if the QC and QA Inspectors verify the primed surfaces have not been contaminated.
- (e) Erection and handling damage to the shop applied system shall be spot cleaned using SSPC-SP3. The surrounding coating at each repair location shall be feathered for a minimum distance of 40 mm (1 1/2 in.) to achieve a smooth transition between the prepared areas and the existing coating. The existing coating in the feathered area shall be roughened to insure proper adhesion of the repair coats. The areas cleaned to bare metal shall be spot painted with aluminum epoxy mastic. The intermediate and finish coat shall be spot applied to with at least a 150 mm (6 inch) overlap onto the existing finish coat.

**Aluminum Epoxy Mastic/ Waterborne Acrylic Paint system.** This system shall be for shop or field application of the entire coating system.

Before priming with aluminum epoxy mastic the steel the surfaces to be primed shall be prepared according to SSPC SP6 for Commercial Blast Cleaning. In the field, before the application of the intermediate coat, the prime coat and any newly installed fasteners shall be spot solvent cleaned per SSPC-SP 1 and all surfaces pressure washed to remove dirt, oil, lubricants, oxidation products, and foreign substances. Washing shall involve the use of potable water at a pressure between 7 MPa (1000 psi) and 34 MPa (5000 psi) and according to "Low Pressure Water Cleaning" of SSPC-SP12. Paint spray equipment shall not be used to perform the water cleaning. All damaged shop primed areas shall then be spot cleaned per SSPC-SP3 and spot primed with aluminum epoxy mastic. The structural steel shall then receive one full intermediate coat of aluminum epoxy mastic and one full topcoat of waterborne acrylic paint.

- d) Paint drips, spills, and overspray must be controlled. If containment is used to control paint drips, spills, and overspray, the containment shall be dropped and all equipment secured when sustained wind speeds of 64 kph (40 mph) or greater occur. When the protective coverings need to be attached to the structure, they shall be attached by bolting, clamping, or similar means. Welding or drilling into the structure is prohibited unless approved by the Engineer in writing.
- e) Coating Dry Film Thickness (dft), measured according to SSPC-PA2:
  - Epoxy Mastic Primer: 125 microns (5 mils) min., 180 microns (7 mils) max.
  - Epoxy Mastic Intermediate Coat: 125 microns (5 mils) min., 180 microns (7 mils) max.
  - Acrylic Topcoat: 50 microns (2 mils) min., 100 microns (4 mils) max.

The total dry film thickness, excluding the spot areas touched up with epoxy mastic, shall be between 300 and 460 microns (12 and 18 mils).

- f) The pressure washing requirement above may be waived if the QC and QA Inspectors verify the primed surfaces have not been contaminated.
  
- d) Damage to the paint system shall be spot cleaned using SSPC-SP3. The cleaned areas shall be spot painted with a penetrating sealer as recommended by the manufacturer, which shall overlap onto the existing topcoat. Then the aluminum epoxy mastic shall be spot applied not to go beyond the area painted with the sealer. The acrylic topcoat shall be spot applied to the mastic with at least a 150 mm (6 inch) overlap onto the existing topcoat.

The paint manufacturer's product data sheets shall be available for QA review in the shop and submitted to the Engineer prior to start of field work and the requirements as outlined in the data sheets shall be followed.

#### Special Instructions.

Painting Date/System Code. At the completion of the work, the Contractor shall stencil in contrasting color paint the date of painting the bridge, the painting Contractors name, and the paint type code from the Structure Information and Procedure Manual for the system used. The letters shall be capitals, not less than 50 mm (2 in.) and not more than 75 mm (3 in.) in height.

The stencil shall contain the following wording "PAINTED BY (insert the name of the painting Contractor)" and shall show the month and year in which the painting was completed, followed by "CODE S" for the Inorganic Zinc/ Acrylic System, "CODE X" for the Organic Zinc/ Epoxy/ Urethane System, "CODE AB" for the Organic Zinc/ Epoxy/ Urethane System (shop applied), and "CODE U" for the Aluminum Epoxy Mastic/ Acrylic System all stenciled on successive lines. This information shall be stenciled on the cover plate of a truss end post near the top of the railing, or on the outside face of an outside stringer near both ends of the bridge facing traffic, or at some equally visible surface designated by the Engineer.

Method of Measurement. Shop cleaning and painting new structures will not be measured for payment. Field cleaning and painting will not be measured for payment except when performed under a contract that contains a separate pay item for this work.

Basis of Payment. This work will be paid for according to Article 506.07.

#### **UNDERWATER STRUCTURE EXCAVATION PROTECTION**

Effective: April 1, 1995

Revised: August 21, 2002

Description. This work shall include all labor, materials, and equipment necessary for the protection of any excavations in water that may be needed for construction at the locations shown on the plans and as required by the Specifications. The protection may consist of diverting the water for the excavation by the uses of timbers, sheet piling, approved granular



embankment material or other structural elements adequate to support the excavation and need not be watertight. All concrete placement below the waterline shall be tremied underwater into forms according to Article 503.08 of the Standard Specifications. Tremied concrete shall be placed to an elevation 300 mm (1 ft) above the water level at the time of construction.

The Contractor's plan for the subject protection must be approved by the Engineer before excavation protection and construction may begin. Any system selected by the Contractor in which safe design and construction requires that loads and stresses be computed and the size and strength of parts determined by mathematical calculations based upon scientific principles and engineering data shall be prepared and sealed by an Illinois Licensed Structural Engineer. When the excavation protection is no longer required, it shall be removed unless otherwise specified by the Engineer. All materials removed will become the property of the Contractor.

Basis of Payment. Excavation protection for structures will be paid for at the contract unit price each, for UNDERWATER STRUCTURE EXCAVATION PROTECTION at the locations specified.

### **PIPE UNDERDRAINS FOR STRUCTURES**

Effective May 17, 2000

December 12, 2005

Description. This work shall consist of furnishing and installing a pipe underdrain system as shown on the plans, as specified herein, and as directed by the Engineer.

Materials. Materials shall meet the requirements as set forth below:

The perforated pipe drain shall be according to Article 601.02 of the Standard Specifications. Outlet pipes or pipes connecting to a separate storm sewer system shall not be perforated.

The drainage aggregate shall be a combination of one or more of the following gradations, FA1, FA2, CA5, CA7, CA8, CA11, or CA13 thru 15, according to Sections 1003 and 1004 of the Standard Specifications.

The fabric surrounding the drainage aggregate shall be Geotechnical Fabric for French Drains according to Article 1080.05 of the Standard Specifications.

Construction Requirements. All work shall be according to the applicable requirements of Section 601 of the Standard Specifications except as modified below.

The pipe underdrains shall consist of a perforated pipe drain situated at the bottom of an area of drainage aggregate wrapped completely in geotechnical fabric and shall be installed to the lines and gradients as shown on the plans.

Method of Measurement. Pipe Underdrains for Structures shall be measured for payment in meters (feet), in place. Measurement shall be along the centerline of the pipe underdrains. All connectors, outlet pipes, elbows, and all other miscellaneous items shall be included in the measurement. Concrete headwalls shall be included in the cost of Pipe Underdrains for Structures, but shall not be included in the measurement for payment.

Basis of Payment. This work will be paid for at the contract unit price per meter (foot) for PIPE UNDERDRAINS FOR STRUCTURES of the diameter specified, installed and measured as specified herein. Furnishing and installation of the drainage aggregate, geotechnical fabric, forming holes in structural elements and any excavation required, will not be paid for separately, but shall be included in the cost of the pipe underdrains for structures.

**POROUS GRANULAR EMBANKMENT (SPECIAL)**

Effective: September 28, 2005

Description. This work shall consist of furnishing, and placing porous granular embankment (special) material as detailed on the plans, according to Section 207 except as modified herein.

Materials. The gradation of the porous granular material may be any of the following CA 8 thru CA 18, FA 1 thru FA 4, FA 7 thru FA 9, and FA 20 according to Articles 1003 and 1004.

Basis of Payment. This work will be paid for at the contract unit price per Cubic Yard (Cubic Meter) for POROUS GRANULAR EMBANKMENT (SPECIAL).

**PROTECTIVE COAT**

Effective March 15, 2006

**Description.** The following shall replace Article 503.19 of the Standard Specifications.

**503.19 Protective Coat Application.** A protective coat shall be applied to the entire top surface of bridge decks, sidewalks, hubguards, and the top and inside vertical faces of sidewalk parapets, end posts, and wings when the concrete is at least 14 days old. This work shall be performed after saw cut grooving, and before the bridge deck is marked and opened to traffic.

Before the protective coat is applied, the concrete surface shall have at least a 48-hour drying period since the last rain and shall be cleaned to remove all oil, grime, and loose particles which would prevent the mixture from penetrating the concrete. Immediately prior to application of the protective coat, the surface shall be blown with oil-free compressed air.

The protective coat shall consist of two applications of the mixture and each application shall be at a rate of 50 sq yd/gal (11 sq m/L) or less.

The protective coat shall be sprayed on the surface using hand methods or with a mechanical spraying machine which will perform the work in a satisfactory manner. The spray nozzle(s) shall be within 18 in. (450 mm) of the concrete or as directed by the Engineer. The interior of the distributor tank shall be thoroughly cleaned prior to placing the protective coat therein. Unless otherwise directed by the Engineer, the temperature of the concrete and air shall be 40 °F (4.4 °C) or higher at the time of application.

The second application of the protective coat shall be made when, in the opinion of the Engineer, the concrete has regained its dry appearance.

Traffic shall be prohibited from the area until the concrete has regained its dry appearance.

If an application of sand is required by the Engineer for blotter material, it will be paid for according to Article 109.04.

CAUTION: Linseed oil – petroleum spirits mixture has a low flash point and is readily flammable.

At the Contractors option a concrete sealer may be substituted for the boiled linseed oil protective coat. The concrete sealer shall be according to Section 1026, except the sealer shall be one of the products allowed for bridge decks For the concrete sealer, the concrete surface shall be prepared as required for the boiled linseed oil protective coat. The concrete sealer shall be applied per the manufacturer's instructions, and information provided in the approved list..



Route FAP 315  
Section 55-2  
County MCDONOUGH

Marked IL 336  
Project No. \_\_\_\_\_

This plan has been prepared to comply with the provisions of the NPDES Permit Number ILR10, issued by the Illinois Environmental Protection Agency for storm water discharges from Construction Site Activities.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Joseph E. Houde  
Signature  
Regional Engineer  
Title

3/31/06  
Date

1. Site Description

a. The following is a description of the construction activity which is the subject of this plan (use additional pages, as necessary):

The work consists of constructing a four lane expressway at locations shown in the plans. Access ramps will be constructed at U.S. 136 west edge of Macomb. In addition to pavement construction, the improvements includes earth excavation and embankment, the construction of several bridges, railroad overpass, placement of pavement underdrain system, box culverts, pipe culverts, drainage ditch construction, construction of median crossovers, guardrail, tree removal, and miscellaneous items pertaining to this work.

b. The following is a description of the intended sequence of major activities which will disturb soils for major portions of the construction site, such as grubbing, excavation and grading (use additional pages, as necessary):

Sequence of Construction as follows:

- |  |   |
|--|---|
| 1. Clearing, Removal and Demolition              | 2. Erosion Control and Inlet Protection |
| 3. Underground Utilities and Drainage Structures | 4. Excavation and Rough Grading         |
| 5. Roadway and Bridge Construction               | 6. Final Grading and Seeding            |

c. The total area of the construction site is estimated to be 201 acres.

The total area of the site that it is estimated will be disturbed by excavation, grading or other activities is 201 acres.

- d. The estimated runoff coefficients of the various areas of the site after construction activities are completed are contained in the project drainage study which is hereby incorporated by reference in this plan. Information describing the soils at the site is contained either in the Soils Report for the project, which is hereby incorporated by reference, or in an attachment to this plan.
- e. The design/project report, hydraulic report, or plan documents, hereby incorporated by reference, contain site map(s) indicating drainage patterns and approximate slopes anticipated after major grading activities, areas of major soil disturbance, the location of major structural and nonstructural controls identified in the plan, the location of areas where stabilization practices are expected to occur, surface waters (including wetlands), and locations where storm water is discharged to a surface water.
- f. The names of receiving water(s) and areal extent of wetland acreage at the site are in the design/project report or plan documents which are incorporated by reference as a part of this plan.

## 2. Controls

This section of the plan addresses the various controls that will be implemented for each of the major construction activities described in 1.b. above. For each measure discussed, the contractor that will be responsible for its implementation is indicated. Each such contractor has signed the required certification on forms which are attached to, and a part of, this plan:

### a. Erosion and Sediment Controls

- (i) Stabilization Practices. Provided below is a description of interim and permanent stabilization practices, including site-specific scheduling of the implementation of the practices. Site plans will ensure that existing vegetation is preserved where attainable and disturbed portions of the site will be stabilized. Stabilization practices may include: temporary seeding, permanent seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. Except as provided in 2.a.(i).(A) and 2.b., stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased, on all disturbed portions of the site where construction activity will not occur for a period of 21 or more calendar days.
  - (A) where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently ceases is precluded by snow cover, stabilization measures shall be initiated as soon as practicable thereafter.

Description of Stabilization Practices (use additional pages, as necessary):

The intent of the stabilization practices is to provide erosion control blanket, mulch, or Rip Rap on areas disturbed as soon as possible. Temporary seeding for erosion control will be placed as soon as possible on disturbed areas, until permanent controls can be installed. Temporary ditch checks will be constructed in ditch bottoms to stabilized ditch bottoms and prevent erosion.

- (ii) **Structural Practices.** Provided below is a description of structural practices that will be implemented, to the degree attainable, to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Such practices may include silt fences, earth dikes, drainage swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions and temporary or permanent sediment basins. The installation of these devices may be subject to Section 404 of the Clean Water Act.

Description of Structural Practices (use additional pages, as necessary):

Perimeter Erosion Barrier (silt fence) will be used in all areas where runoff from disturbed areas has the potential to travel offsite or into swales, ditches, ponds, wetlands, or other natural water bodies. Sediment basin and a silt curtain will be used in selected areas. Temporary ditch checks will be placed within proposed drainage swales and ditches as shown on the plans. Inlet and Pipe Protection will be used on all culverts and storm sewer inlets where runoff from disturbed areas is collected.

Perimeter Erosion Barrier (silt fence) shall be constructed at the toes of all temporary stockpiles.

Temporary measures to remain in place until permanent measures are taken and/or vegetation has been established.

Rip Rap and Revetment mat will used at the larger culverts inlets and outlets. A temporary slope drain will used at the RailRoad shofly along with a brow ditch to divert clean water.

**b. Storm Water Management**

Provided below is a description of measures that will be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed. The installation of these devices may be subject to Section 404 of the Clean Water Act.

- (i) Such practices may include: storm water detention structures (including wet ponds); storm water retention structures; flow attenuation by use of open vegetated swales and natural depressions; infiltration of runoff on site; and sequential systems (which combine several practices). **The practices selected for implementation were determined on the basis of the technical guidance in Section 10-300 (Design Considerations) in Chapter 10 (Erosion and Sedimentation Control) of the Illinois Department of Transportation Drainage Manual. If practices other than those discussed in Section 10-300 are selected for implementation or if practices are applied to situations different from those covered in Section 10-300, the technical basis for such decisions will be explained below.**
- (ii) Velocity dissipation devices will be placed at discharge locations and along the length of any outfall channel as necessary to provide a non-erosive velocity flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g., maintenance of hydrologic conditions, such as the hydroperiod and hydrodynamics present prior to the initiation of construction activities).

Description of Storm Water Management Controls (use additional pages, as necessary):

Riprap will be placed at culvert outlets at the locations shown on the plans to dissipate velocity and provide channel stability. Aggregate Ditch will be placed at locations shown on the plans to provide channel stability.

The Engineer may add additional temporary measures to fit field conditions.

**c. Other Controls**

- (i) Waste Disposal. No solid materials, including building materials, shall be discharged into Waters of the State, except as authorized by a Section 404 permit.
- (ii) The provisions of this plan shall ensure and demonstrate compliance with applicable State and/or local waste disposal, sanitary sewer or septic system regulations.

**d. Approved State or Local Plans**

The management practices, controls and provisions contained in this plan will be in accordance with IDOT specifications, which are at least as protective as the requirements contained in the Illinois Environmental Protection Agency's Illinois Urban Manual, 1995. Procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by local officials shall be described or incorporated by reference in the space provided below. Requirements specified in sediment and erosion site plans or site permits or storm water management site plans or site permits approved by local officials that are applicable to protecting surface water resources are, upon submittal of an NOI to be authorized to discharge under permit ILR10 incorporated by reference and are enforceable under this permit even if they are not specifically included in the plan.

Description of procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by local officials:

Not Applicable.



### 3. Maintenance

The following is a description of procedures that will be used to maintain, in good and effective operating conditions, vegetation, erosion and sediment control measures and other protective measures identified in this plan (use additional pages, as necessary):

Maintenance of erosion control items will be as described in Section 280 of the Standard Specifications, including additional temporary seeding for erosion control when necessary and cleaning of silt as required due to field conditions and repairing damage as it occurs.

### 4. Inspections

Qualified personnel shall inspect disturbed areas of the construction site which have not been finally stabilized, structural control measures, and locations where vehicles enter or exit the site. Such inspections shall be conducted at least once every seven (7) calendar days and within 24 hours of the end of a storm that is 0.5 inches or greater or equivalent snowfall.

- a. Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the plan shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. Locations where vehicles enter or exit the site shall be inspected for evidence of off site sediment tracking.
- b. Based on the results of the inspection, the description of potential pollutant sources identified in section 1 above and pollution prevention measures identified in section 2 above shall be revised as appropriate as soon as practicable after such inspection. Any changes to this plan resulting from the required inspections shall be implemented within 7 calendar days following the inspection.
- c. A report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of this storm water pollution prevention plan, and actions taken in accordance with section 4.b. shall be made and retained as part of the plan for at least three (3) years after the date of the inspection. The report shall be signed in accordance with Part VI. G of the general permit.
- d. If any violation of the provisions of this plan is identified during the conduct of the construction work covered by this plan, the Resident Engineer or Resident Technician shall complete and file an "Incidence of Noncompliance" (ION) report for the identified violation. The Resident Engineer or Resident Technician shall use forms provided by the Illinois Environmental Protection Agency and shall include specific information on the cause of noncompliance, actions which were taken to prevent any further causes of noncompliance, and a statement detailing any environmental impact which may have resulted from the noncompliance. All reports of noncompliance shall be signed by a responsible authority in accordance with Part VI. G of the general permit.

The report of noncompliance shall be mailed to the following address:

Illinois Environmental Protection Agency  
Division of Water Pollution Control  
Attn: Compliance Assurance Section  
1021 North Grand East  
Post Office Box 19276  
Springfield, Illinois 62794-9276

**5. Non-Storm Water Discharges**

Except for flows from fire fighting activities, sources of non-storm water that is combined with storm water discharges associated with the industrial activity addressed in this plan must be described below. Appropriate pollution prevention measures, as described below, will be implemented for the non-storm water component(s) of the discharge. (Use additional pages as necessary to describe non-storm water discharges and applicable pollution control measures).

Non-storm water discharges shall be directed to erosion control facilities prior to discharging from the site. Erosion control facilities shall be perimeter erosion barrier, inlet and pipe protection, ditch checks. If existing erosion control facilities are not present at the proposed point of non-storm water discharge, then erosion facilities shall be constructed, as approved by the engineer, prior to the release of a non-storm water discharge.

Erosion control facilities are required for the following non-storm water discharges:

- Vehicle Wash Down Water
- Pavement Cleaning
- Water for Dust Control
- Water for Seeding and Landscaping Purposes



This certification statement is a part of the Storm Water Pollution Prevention Plan for the project described below, in accordance with NPDES Permit No. ILR10, issued by the Illinois Environmental Protection Agency on May 14, 1998.

**Project Information:**

Route FAP 315

Marked IL 336

Section 55-2

Project No. \_\_\_\_\_

County MCDONOUGH

I certify under penalty of law that I understand the terms of the general National Pollutant Discharge Elimination System (NPDES) permit (ILR 10) that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Title

\_\_\_\_\_  
Name of Firm

\_\_\_\_\_  
Street Address

\_\_\_\_\_  
City State

\_\_\_\_\_  
Zip Code

\_\_\_\_\_  
Telephone Number

**EXHIBIT "C-1"**

**Agreement  
Between  
BNSF RAILWAY COMPANY  
and the  
CONTRACTOR**

**BNSF RAILWAY COMPANY**  
**Attention: Manager Public Projects**

**Railway File:** \_\_\_\_\_  
**Agency Project:** \_\_\_\_\_

Gentlemen:

The undersigned (hereinafter called, the "Contractor"), has entered into a contract (the "Contract") dated \_\_\_\_\_, 200\_, [\*\*\*Drafter's Note: Insert the date of the contract between the Agency and the Contractor here \*\*] with \_\_\_\_\_ [\*\*Drafter's Note: insert the name of the Agency here\*\*] for the performance of certain work in connection with the following project:

\_\_\_\_\_. Performance of such work will necessarily require contractor to enter BNSF RAILWAY COMPANY ("Railway") right of way and property ("Railway Property"). The Contract provides that no work will be commenced within Railway Property until the Contractor employed in connection with said work for \_\_\_\_\_ [insert Agency name here] (i) executes and delivers to Railway an Agreement in the form hereof, and (ii) provides insurance of the coverage and limits specified in such Agreement and Section 3 herein. If this Agreement is executed by a party who is not the Owner, General Partner, President or Vice President of Contractor, Contractor must furnish evidence to Railway certifying that the signatory is empowered to execute this Agreement on behalf of Contractor.

Accordingly, in consideration of Railway granting permission to Contractor to enter upon Railway Property and as an inducement for such entry, Contractor, effective on the date of the Contract, has agreed and does hereby agree with Railway as follows:

**Section 1. RELEASE OF LIABILITY AND INDEMNITY**

Contractor hereby waives, releases, indemnifies, defends and holds harmless Railway for all judgments, awards, claims, demands, damages and expenses (including attorneys' fees), for injury or death to all persons, including Railway's and Contractor's officers and employees, and for loss and damage to property belonging to any person, including the parties hereto, arising in any manner from Contractor's or any of Contractor's subcontractors' acts or omissions or any work performed on or about Railway's property or right-of-way, excepting only to the extent that such claims or damages are proximately caused by the negligence of Railway.

**THE INDEMNIFICATION OBLIGATION ASSUMED BY CONTRACTOR INCLUDES ANY CLAIMS, SUITS OR JUDGMENTS BROUGHT AGAINST RAILWAY UNDER THE FEDERAL EMPLOYEE'S LIABILITY ACT, INCLUDING CLAIMS FOR STRICT LIABILITY UNDER THE SAFETY APPLIANCE ACT OR THE BOILER INSPECTION ACT, WHENEVER SO CLAIMED.**

Contractor further agrees, at its expense, in the name and on behalf of Railway, that it will adjust and settle all claims made against Railway, and will, at Railway's discretion, appear and defend any suits or actions of law or in equity brought against Railway on any claim or cause of action arising or growing out of or in any manner connected with any liability assumed by Contractor under this Agreement for which Railway is liable or is alleged to be liable. Railway will give notice to Contractor, in writing, of the receipt or dependency of such claims and

Contractor further agrees, at its expense, in the name and on behalf of Railway, that it will adjust and settle all claims made against Railway, and will, at Railway's discretion, appear and defend any suits or actions of law or in equity brought against Railway on any claim or cause of action arising or growing out of or in any manner connected with any liability assumed by Contractor under this Agreement for which Railway is liable or is alleged to be liable. Railway will give notice to Contractor, in writing, of the receipt or dependency of such claims and thereupon Contractor must proceed to adjust and handle to a conclusion such claims, and in the event of a suit being brought against Railway, Railway may forward summons and complaint or other process in connection therewith to Contractor, and Contractor, at Railway's discretion, must defend, adjust, or settle such suits and protect, indemnify, and save harmless Railway from and against all damages, judgments, decrees, attorney's fees, costs, and expenses growing out of or resulting from or incident to any such claims or suits.

It is mutually understood and agreed that the assumption of liabilities and indemnification provided for in this Agreement survive any termination of this Agreement.

## Section 2. TERM

This Agreement is effective from the date of the Contract until (i) the completion of the project set forth herein, and (ii) full and complete payment to Railway of any and all sums or other amounts owing and due hereunder.

## Section 3. INSURANCE

Contractor must, at its sole cost and expense, procure and maintain during the life of this Agreement the following insurance coverage:

A. Commercial General Liability insurance. This insurance must contain broad form contractual liability with a combined single limit of a minimum of \$5,000,000 each occurrence and an aggregate limit of at least \$10,000,000. Coverage must be purchased on a post 1998 ISO occurrence form or equivalent and include coverage for, but not limit to the following:

- ◆ Bodily Injury and Property Damage
- ◆ Personal Injury and Advertising Injury
- ◆ Fire legal liability
- ◆ Products and completed operations

This policy must also contain the following endorsements, which must be indicated on the certificate of insurance:

- ◆ It is agreed that any workers' compensation exclusion does not apply to *Railroad* payments related to the Federal Employers Liability Act or a *Railroad* Wage Continuation Program or similar programs and any payments made are deemed not to be either payments made or obligations assumed under any Workers Compensation, disability benefits, or unemployment compensation law or similar law.
- ◆ The definition of insured contract must be amended to remove any exclusion or other limitation for any work being done within 50 feet of railroad property.
- ◆ Any exclusions related to the explosion, collapse and underground hazards must be removed.

No other endorsements limiting coverage as respects obligations under this Agreement may be included on the policy.

B. Business Automobile Insurance. This insurance must contain a combined single limit of at least \$1,000,000 per occurrence, and include coverage for, but not limited to the following:

- ◆ Bodily injury and property damage
- ◆ Any and all vehicles owned, used or hired

C. Workers Compensation and Employers Liability insurance including coverage for, but not limited to:

- ◆ \_\_\_\_\_'s statutory liability under the worker's compensation laws of the state(s) in which the work is to be performed. If optional under State law, the insurance must cover all employees anyway.
- ◆ Employers' Liability (Part B) with limits of at least \$500,000 each accident, \$500,000 by disease policy limit, \$500,000 by disease each employee.

D. Railroad Protective Liability insurance naming only the *Railroad* as the Insured with coverage of at least \$5,000,000 per occurrence and \$10,000,000 in the aggregate. The policy Must be issued on a standard ISO form CG 00 35 10 93 and include the following:

- ◆ Endorsed to include the Pollution Exclusion Amendment (ISO form CG 28 31 10 93)
- ◆ Endorsed to include the Limited Seepage and Pollution Endorsement.
- ◆ Endorsed to remove any exclusion for punitive damages.
- ◆ No other endorsements restricting coverage may be added.
- ◆ The original policy must be provided to the *Railroad* prior to performing any work or services under this Agreement

**Other Requirements:**

All policies (applying to coverage listed above) must not contain an exclusion for punitive damages and certificates of insurance must reflect that no exclusion exists.

Contractor agrees to waive its right of recovery against *Railroad* for all claims and suits against *Railroad*. In addition, its insurers, through the terms of the policy or policy endorsement, waive their right of subrogation against *Railroad* for all claims and suits. The certificate of insurance must reflect the waiver of subrogation endorsement. Contractor further waives its right of recovery, and its insurers also waive their right of subrogation against *Railroad* for loss of its owned or leased property or property under contractor's care, custody or control.

Contractor's insurance policies through policy endorsement, must include wording which states that the policy is primary and non-contributing with respect to any insurance carried by *Railroad*. The certificate of insurance must reflect that the above wording is included in evidenced policies.

All policy(ies) required above (excluding Workers Compensation and if applicable, Railroad Protective) must include a severability of interest endorsement and *Railroad* must be named as an additional insured with respect to work performed under this agreement. Severability of interest and naming *Railroad* as additional insured must be indicated on the certificate of insurance.

Contractor is not allowed to self-insure without the prior written consent of *Railroad*. If granted by *Railroad*, any deductible, self-insured retention or other financial responsibility for claims must be covered directly by contractor in lieu of insurance. Any and all *Railroad* liabilities that would otherwise, in accordance with the provisions of this *Agreement*, be covered by contractor's insurance will be covered as if contractor elected not to include a deductible, self-insured retention or other financial responsibility for claims.

Prior to commencing the Work, contractor must furnish to *Railroad* an acceptable certificate(s) of insurance including an original signature of the authorized representative evidencing the required coverage, endorsements, and amendments and referencing the contract audit/folder number if available. The policy(ies) must contain a provision that obligates the insurance company(ies) issuing such policy(ies) to notify *Railroad* in writing at least 30 days prior to any cancellation, non-renewal, substitution or material alteration. This cancellation provision must be indicated on the certificate of insurance. Upon request from *Railroad*, a certified duplicate original of any required policy must be furnished. Contractor should send the certificate(s) to the following address:

BNSF RISK MANAGEMENT  
2500 Lou Menk Drive AOB-1  
Fort Worth, TX 76131-2828  
Fax: 817-352-7207

Any insurance policy must be written by a reputable insurance company acceptable to *Railroad* or with a current Best's Guide Rating of A- and Class VII or better, and authorized to do business in the state(s) in which the service is to be provide.

Contractor represents that this *Agreement* has been thoroughly reviewed by contractor's insurance agent(s)/broker(s), who have been instructed by contractor to procure the insurance coverage required by this *Agreement*. Allocated Loss Expense must be in addition to all policy limits for coverages referenced above.

Not more frequently than once every five years, *Railroad* may reasonably modify the required insurance coverage to reflect then-current risk management practices in the railroad industry and underwriting practices in the insurance industry.

If any portion of the operation is to be subcontracted by contractor, contractor must require that the subcontractor provide and maintain the insurance coverages set forth herein, naming *Railroad* as an additional insured, and requiring that the subcontractor release, defend and indemnify *Railroad* to the same extent and under the same terms and conditions as contractor is required to release, defend and indemnify *Railroad* herein.

Failure to provide evidence as required by this section will entitle, but not require, *Railroad* to terminate this *Agreement* immediately. Acceptance of a certificate that does not comply with this section will not operate as a waiver of contractor's obligations hereunder.

The fact that insurance (including, without limitation, self-insurance) is obtained by contractor will not be deemed to release or diminish the liability of contractor including, without limitation, liability under the indemnity provisions of this *Agreement*. Damages recoverable by *Railroad* will not be limited by the amount of the required insurance coverage.

For purposes of this section, *Railroad* means "Burlington Northern Santa Fe Corporation", "BNSF RAILWAY COMPANY" and the subsidiaries, successors, assigns and affiliates of each.

#### **Section 4. EXHIBIT "C" CONTRACTOR REQUIREMENTS**

The Contractor must observe and comply with the provisions, obligations, requirements and limitations contained in the Contract and the Contractor Requirements set forth on Exhibit "C" attached to the Contract and this Agreement, including, but not be limited to, payment of all costs incurred for any damages to Railway roadbed, tracks, and/or appurtenances thereto, resulting from use, occupancy, or presence of its employees, representatives, or agents or subcontractors on or about the construction site.

#### **Section 5. TRAIN DELAY**

Contractor is responsible for and hereby indemnifies and holds harmless Railway (including its affiliated railway companies, and its tenants) for, from and against all damages arising from any unscheduled delay to a freight or passenger train which affects Railway's ability to fully utilize its equipment and to meet customer service and contract obligations. Contractor will be billed, as further provided below, for the economic losses arising from loss of use of equipment, contractual loss of incentive pay and bonuses and contractual penalties resulting from train delays, whether caused by Contractor, or subcontractors, or by the Railway performing work under this Agreement. Railway agrees that it will not perform any act to unnecessarily cause train delay.

For loss of use of equipment, Contractor will be billed the current freight train hour rate per train as determined from Railway's records. Any disruption to train traffic may cause delays to multiple trains at the same time for the same period.

Additionally, the parties acknowledge that passenger, U.S. mail trains and certain other grain, intermodal, coal and freight trains operate under incentive/penalty contracts between Railway and its customer(s). Under these arrangements, if Railway does not meet its contract service commitments, Railway may suffer loss of performance or incentive pay and/or be subject to penalty payments. Contractor is responsible for any train performance and

incentive penalties or other contractual economic losses actually incurred by Railway which are attributable to a train delay caused by Contractor or its subcontractors.

The contractual relationship between Railway and its customers is proprietary and confidential. In the event of a train delay covered by this Agreement, Railway will share information relevant to any train delay to the extent consistent with Railway confidentiality obligations. Damages for train delay for certain trains may be as high as \$50,000.00 per incident.

Contractor and its subcontractors must give Railway's representative (\_\_\_\_) \_\_\_\_\_ weeks advance notice of the times and dates for proposed work windows. Railway and Contractor will establish mutually agreeable work windows for the project. Railway has the right at any time to revise or change the work windows due to train operations or service obligations. Railway will not be responsible for any additional costs or expenses resulting from a change in work windows. Additional costs or expenses resulting from a change in work windows shall be accounted for in Contractor's expenses for the project.

Contractor and subcontractors must plan, schedule, coordinate and conduct all Contractor's work so as to not cause any delays to any trains.

Kindly acknowledge receipt of this letter by signing and returning to the Railway two original copies of this letter, which, upon execution by Railway, will constitute an Agreement between us.

\_\_\_\_\_  
(Contractor)

**BNSF Railway Company**

By: \_\_\_\_\_  
Printed Name: \_\_\_\_\_  
Title: \_\_\_\_\_

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Manager Public Projects

Contact Person: \_\_\_\_\_  
Address \_\_\_\_\_

Accepted and effective this \_\_\_\_\_ day of 20\_\_.

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
Fax: \_\_\_\_\_  
Phone: \_\_\_\_\_  
E-mail: \_\_\_\_\_



**EXHIBIT "C"**  
**CONTRACTOR REQUIREMENTS**

**1.01 General**

- **1.01.01** The Contractor must cooperate with **BNSF RAILWAY COMPANY**, hereinafter referred to as "Railway" where work is over or under on or adjacent to Railway property and/or right-of-way, hereafter referred to as "Railway Property", during the construction of \_\_\_\_\_.
- **1.01.02** The Contractor must execute and deliver to the Railway duplicate copies of the Exhibit "C-1" Agreement, in the form attached hereto, obligating the Contractor to provide and maintain in full force and effect the insurance called for under Section 3 of said Exhibit "C-1".
- **1.01.03** The Contractor must plan, schedule and conduct all work activities so as not to interfere with the movement of any trains on Railway Property.
- **1.01.04** The Contractor's right to enter Railway's Property is subject to the absolute right of Railway to cause the Contractor's work on Railway's Property to cease if, in the opinion of Railway, Contractor's activities create a hazard to Railway's Property, employees, and/or operations.
- **1.01.05** The Contractor is responsible for determining and complying with all Federal, State and Local Governmental laws and regulations, including, but not limited to environmental laws and regulations (including but not limited to the Resource Conservation and Recovery Act, as amended; the Clean Water Act, the Oil Pollution Act, the Hazardous Materials Transportation Act, CERCLA), and health and safety laws and regulations. The Contractor hereby indemnifies, defends and holds harmless Railway for, from and against all fines or penalties imposed or assessed by Federal, State and Local Governmental Agencies against the Railway which arise out of Contractor's work under this Agreement.
- **1.01.06** The Contractor must notify the (Agency) at \_\_\_\_\_ and Railway's Manager Public Projects, telephone number ( ) \_\_\_\_\_ at least thirty (30) calendar days before commencing any work on Railway Property. Contractors notification to Railway, must refer to Railroad's file \_\_\_\_\_.
- **1.01.07** For any falsework above any tracks or any excavations located, whichever is greater, within twenty-five (25) feet of the nearest track or intersecting a slope from the plane of the top of rail on a 1 ½ horizontal to 1 vertical slope beginning at eleven (11) feet from centerline of the nearest track, both measured perpendicular to center line of track, the Contractor must furnish the Railway five sets of working drawings showing details of construction affecting Railway Property and tracks. The working drawing must include the proposed method of installation and removal of falsework, shoring or cribbing, not included in the contract plans and two sets of structural calculations of any falsework, shoring or cribbing. All calculations must take into consideration railway surcharge loading and must be designed to meet American Railway Engineering and Maintenance-of-Way Association (previously known as American Railway Engineering Association) Coopers E-80 live loading standard. All drawings and calculations must be stamped by a registered professional engineer licensed to practice in the state the project is located. The Contractor must not begin work until notified by the Railway that plans have been approved. The Contractor will be required to use lifting devices such as, cranes and/or winches to place or to remove any falsework over Railway's tracks. In no case will the Contractor be relieved of responsibility for results obtained by the implementation of said approved plans.
- **1.01.08** Subject to the movement of Railway's trains, Railway will cooperate with the Contractor such that the work may be handled and performed in an efficient manner. The Contractor will have no claim whatsoever for any type of damages or for extra or additional compensation in the event his work is delayed by the Railway.

## 1.02 Contractor Safety Orientation

- **1.02.01** No employee of the Contractor, its subcontractors, agents or invitees may enter Railway Property without first having completed Railway's Engineering Contractor Safety Orientation, found on the web site [www.contractororientation.com](http://www.contractororientation.com). The Contractor must ensure that each of its employees, subcontractors, agents or invitees completes Railway's Engineering Contractor Safety Orientation through internet sessions before any work is performed on the Project. Additionally, the Contractor must ensure that each and every one of its employees, subcontractors, agents or invitees possesses a card certifying completion of the Railway Contractor Safety Orientation before entering Railway Property. The Contractor is responsible for the cost of the Railway Contractor Safety Orientation. The Contractor must renew the Railway Contractor Safety Orientation annually. Further clarification can be found on the web site or from the Railway's Representative.

## 1.03 Railway Requirements

- **1.03.01** The Contractor must take protective measures as are necessary to keep railway facilities, including track ballast, free of sand, debris, and other foreign objects and materials resulting from his operations. Any damage to railway facilities resulting from Contractor's operations will be repaired or replaced by Railway and the cost of such repairs or replacement must be paid for by the Agency.
- **1.03.02** The Contractor must notify the Railway's Division Superintendent \_\_\_\_\_ at (\_\_\_\_\_) \_\_\_\_\_ and provide blasting plans to the Railway for review seven (7) calendar days prior to conducting any blasting operations adjacent to or on Railway's Property.
- **1.03.03** The Contractor must abide by the following temporary clearances during construction:
  - 12'-0" Horizontally from centerline of nearest track
  - 21'-6" Vertically above top of rail
  - 27'-0" Vertically above top of rail for electric wires carrying less than 750 volts
  - 28'-0" Vertically above top of rail for electric wires carrying 750 volts to 15,000 volts
  - 30'-0" Vertically above top of rail for electric wires carrying 15,000 volts to 20,000 volts
  - 34'-0" Vertically above top of rail for electric wires carrying more than 20,000 volts
- **1.03.04** Upon completion of construction, the following clearances shall be maintained:
  - 25' Horizontally from centerline of nearest track
  - 23'-3 1/2" Vertically above top of rail
- **1.03.05** Any infringement within State statutory clearances due to the Contractor's operations must be submitted to the Railway and to the (Agency) \_\_\_\_\_ and must not be undertaken until approved in writing by the Railway, and until the (Agency) \_\_\_\_\_ has obtained any necessary authorization from the State Regulatory Authority for the infringement. No extra compensation will be allowed in the event the Contractor's work is delayed pending Railway approval, and/or the State Regulatory Authority's approval.
- **1.03.06** In the case of impaired vertical clearance above top of rail, Railway will have the option of installing tell-tales or other protective devices Railway deems necessary for protection of Railway operations. The cost of tell-tales or protective devices will be borne by the Agency.
- **1.03.07** The details of construction affecting the Railway's Property and tracks not included in the contract plans must be submitted to the Railway by (Agency) \_\_\_\_\_ for approval before work is undertaken and this work must not be undertaken until approved by the Railway.
- **1.03.08** At other than public road crossings, the Contractor must not move any equipment or materials across Railway's tracks until permission has been obtained from the Railway. The Contractor must obtain a "Temporary Private Crossing Agreement" from the Railway prior to moving his equipment or materials across

the Railway tracks. The temporary crossing must be gated and locked at all times when not required for use by the Contractor. The temporary crossing for use of the Contractor will be at the expense of the Contractor.

- **1.03.09** Discharge, release or spill on the Railway Property of any hazardous substances, oil, petroleum, constituents, pollutants, contaminants, or any hazardous waste is prohibited and Contractor must immediately notify the Railway's Resource Operations Center at 1(800) 832-5452, of any discharge, release or spills in excess of a reportable quantity. Contractor must not allow Railway Property to become a treatment, storage or transfer facility as those terms are defined in the Resource Conservation and Recovery Act or any state analogue.
- **1.03.10** The Contractor upon completion of the work covered by this contract, must promptly remove from the Railway's Property all of Contractor's tools, equipment, implements and other materials, whether brought upon said property by said Contractor or any Subcontractor, employee or agent of Contractor or of any Subcontractor, and must cause Railway's Property to be left in a condition acceptable to the Railway's representative.

#### **1.04 Contractor Roadway Worker on Track Safety Program and Safety Action Plan**

- **1.04.01** Each Contractor that will perform work within 25 feet of the centerline of a track must develop and implement a Roadway Worker Protection/On Track Safety Program and work with Railway Project Representative to develop an on track safety strategy as described in the guidelines listed in the on track safety portion of the Safety Orientation. This Program must provide Roadway Worker protection/on track training for all employees of the Contractor, its subcontractors, agents or invitees. This training is reinforced at the job site through job safety briefings. Additionally, each Contractor must develop and implement the Safety Action Plan, as provided for on the web site [www.contractororientation.com](http://www.contractororientation.com), which will be made available to Railway prior to commencement of any work on Railway Property. During the performance of work, the Contractor must audit its work activities. The Contractor must designate an on-site Project Supervisor who will serve as the contact person for the Railway and who will maintain a copy of the Safety Action Plan, safety audits, and Material Safety Datasheets (MSDS), at the job site.

#### **1.05 Protection of Railway Facilities and Railway Flagger Services:**

- **1.05.01** The Contractor must give Railway's Roadmaster (telephone \_\_\_\_\_) a minimum of thirty (30) calendar days advance notice when flagging services will be required so that the Roadmaster can make appropriate arrangements (i.e., bulletin the flagger's position). If flagging services are scheduled in advance by the Contractor and it is subsequently determined by the parties hereto that such services are no longer necessary, the Contractor must give the Roadmaster five (5) working days advance notice so that appropriate arrangements can be made to abolish the position pursuant to union requirements.
- **1.05.02** Unless determined otherwise by Railway's Project Representative, Railway flagger and protective services and devices will be required and furnished when Contractor's work activities are located over, under and/or within twenty-five (25) feet measured horizontally from centerline of the nearest track and when cranes or similar equipment positioned beyond 25-feet from the track centerline could foul the track in the event of tip over or other catastrophic occurrence, but not limited thereto for the following conditions:
  - **1.05.02a** When in the opinion of the Railway's Representative it is necessary to safeguard Railway's Property, employees, trains, engines and facilities.
  - **1.05.02b** When any excavation is performed below the bottom of tie elevation, if, in the opinion of Railway's representative, track or other Railway facilities may be subject to movement or settlement.
  - **1.05.02c** When work in any way interferes with the safe operation of trains at timetable speeds.
  - **1.05.02d** When any hazard is presented to Railway track, communications, signal, electrical, or other facilities either due to persons, material, equipment or blasting in the vicinity.

- **1.05.02e** Special permission must be obtained from the Railway before moving heavy or cumbersome objects or equipment which might result in making the track impassable.
- **1.05.03** Flagging services will be performed by qualified Railway flaggers.
- **1.05.03a** Flagging crew generally consists of one employee. However, additional personnel may be required to protect Railway Property and operations, if deemed necessary by the Railways Representative.
- **1.05.03b** Each time a flagger is called, the minimum period for billing will be the eight (8) hour basic day.
- **1.05.03c** The cost of flagger services provided by the Railway, when deemed necessary by the Railway's representative, will be borne by the (Agency) \_\_\_\_\_. The estimated cost for one (1) flagger is \$600.00 for an eight (8) hour basic day with time and one-half or double time for overtime, rest days and holidays. The estimated cost for each flagger includes vacation allowance, paid holidays, Railway and unemployment insurance, public liability and property damage insurance, health and welfare benefits, transportation, meals, lodging and supervision. Negotiations for Railway labor or collective bargaining agreements and rate changes authorized by appropriate Federal authorities may increase actual or estimated flagging rates. The flagging rate in effect at the time of performance by the Contractor hereunder will be used to calculate the actual costs of flagging pursuant to this paragraph.
- **1.05.03d** The average train traffic on this route is \_\_\_\_\_ freight trains per 24-hour period at a timetable speed \_\_\_\_\_ MPH and \_\_\_\_\_ passenger trains at a timetable speed of \_\_\_\_\_ MPH.

## **1.06 Contractor General Safety Requirements**

- **1.06.01** Work in the proximity of railway track(s) is potentially hazardous where movement of trains and equipment can occur at any time and in any direction. All work performed by contractors within 25 feet of any track must be in compliance with FRA Roadway Worker Protection Regulations.
- **1.06.02** Before beginning any task on Railway Property, a thorough job safety briefing must be conducted with all personnel involved with the task and repeated when the personnel or task changes. If the task is within 25 feet of any track, the job briefing must include the Railway's flagger, as applicable, and include the procedures the Contractor will use to protect its employees, subcontractors, agents or invitees from moving any equipment adjacent to or across any Railway track(s).
- **1.06.03** Workers must not work within 25 feet of the centerline of any track without an on track safety strategy approved by the Railway's Project Representative. When authority is provided, every contractor employee must know: (1) who the Railway flagger is, and how to contact the flagger, (2) limits of the authority, (3) the method of communication to stop and resume work, and (4) location of the designated places of safety. Persons or equipment entering flag/work limits that were not previously job briefed, must notify the flagger immediately, and be given a job briefing when working within 25 feet of the center line of track.
- **1.06.04** When Contractor employees are required to work on the Railway Property after normal working hours or on weekends, the Railroad's representative in charge of the project must be notified. A minimum of two employees must be present at all times.
- **1.06.05** Any employees, agents or invitees of Contractor or its subcontractors under suspicion of being under the influence of drugs or alcohol, or in the possession of same, will be removed from the Railway's Property and subsequently released to the custody of a representative of Contractor management. Future access to the Railway's Property by that employee will be denied.
- **1.06.06** Any damage to Railway Property, or any hazard noticed on passing trains must be reported immediately to the Railway's representative in charge of the project. Any vehicle or machine which may come in contact with track, signal equipment, or structure (bridge) and could result in a train derailment must be

reported immediately to the Railway representative in charge of the project and to the Railway's Resource Operations Center at 1(800) 832-5452. Local emergency numbers are to be obtained from the Railway representative in charge of the project prior to the start of any work and must be posted at the job site.

- **1.06.07** For safety reasons, all persons are prohibited from having pocket knives, firearms or other deadly weapons in their possession while working on Railway's Property.
- **1.06.08** All personnel protective equipment (PPE) used on Railway Property must meet applicable OSHA and ANSI specifications. Current Railway personnel protective equipment requirements are listed on the web site, [www.contractororientation.com](http://www.contractororientation.com), however, a partial list of the requirements include: a) safety glasses with permanently affixed side shields (no yellow lenses); b) hard hats c) safety shoe with: hardened toes, above-the-ankle lace-up and a defined heel; and d) high visibility retro-reflective work wear. The Railroad's representative in charge of the project is to be contacted regarding local specifications for meeting requirements relating to hi-visibility work wear. Hearing protection, fall protection, gloves, and respirators must be worn as required by State and Federal regulations. **(NOTE – Should there be a discrepancy between the information contained on the web site and the information in this paragraph, the web site will govern.)**
- **1.06.09** The Contractor must not pile or store any materials, machinery or equipment closer than 25'-0" to the center line of the nearest Railway track. Materials, machinery or equipment must not be stored or left within 250 feet of any highway/rail at-grade crossings, where storage of the same will interfere with the sight distances of motorists approaching the crossing. Prior to beginning work, the Contractor must establish a storage area with concurrence of the Railroad's representative.
- **1.06.10** Machines or vehicles must not be left unattended with the engine running. Parked machines or equipment must be in gear with brakes set and if equipped with blade, pan or bucket, they must be lowered to the ground. All machinery and equipment left unattended on Railway's Property must be left inoperable and secured against movement. (See internet Engineering Contractor Safety Orientation program for more detailed specifications)
- **1.06.11** Workers must not create and leave any conditions at the work site that would interfere with water drainage. Any work performed over water must meet all Federal, State and Local regulations.
- **1.06.12** All power line wires must be considered dangerous and of high voltage unless informed to the contrary by proper authority. For all power lines the minimum clearance between the lines and any part of the equipment or load must be; 200 KV or below - 15 feet; 200 to 350 KV - 20 feet; 350 to 500 KV - 25 feet; 500 to 750 KV - 35 feet; and 750 to 1000 KV - 45 feet. If capacity of the line is not known, a minimum clearance of 45 feet must be maintained. A person must be designated to observe clearance of the equipment and give a timely warning for all operations where it is difficult for an operator to maintain the desired clearance by visual means.

## **1.07 Excavation**

- **1.07.01** Before excavating, the Contractor must determine whether any underground pipe lines, electric wires, or cables, including fiber optic cable systems are present and located within the Project work area. The Contractor must determine whether excavation on Railway's Property could cause damage to buried cables resulting in delay to Railway traffic and disruption of service to users. Delays and disruptions to service may cause business interruptions involving loss of revenue and profits. Before commencing excavation, the Contractor must contact BNSF's Field Engineering Representative (\_\_\_\_\_). All underground and overhead wires will be considered HIGH VOLTAGE and dangerous until verified with the company having ownership of the line. **It is the Contractor's responsibility to notify any other companies that have underground utilities in the area and arrange for the location of all underground utilities before excavating.**
- **1.07.02** The Contractor must cease all work and notify the Railway immediately before continuing excavation in the area if obstructions are encountered which do not appear on drawings. If the obstruction is a utility and the owner of the utility can be identified, then the Contractor must also notify the owner immediately. If there

is any doubt about the location of underground cables or lines of any kind, no work must be performed until the exact location has been determined. There will be no exceptions to these instructions.

- **1.07.03** All excavations must be conducted in compliance with applicable OSHA regulations and, regardless of depth, must be shored where there is any danger to tracks, structures or personnel.
- **1.07.04** Any excavations, holes or trenches on the Railway's Property must be covered, guarded and/or protected when not being worked on. When leaving work site areas at night and over weekends, the areas must be secured and left in a condition that will ensure that Railway employees and other personnel who may be working or passing through the area are protected from all hazards. All excavations must be back filled as soon as possible.

## **1.08 Hazardous Waste, Substances and Material Reporting**

- **1.08.01** If Contractor discovers any hazardous waste, hazardous substance, petroleum or other deleterious material, including but not limited to any non-containerized commodity or material, on or adjacent to Railway's Property, in or near any surface water, swamp, wetlands or waterways, while performing any work under this Agreement, Contractor must immediately: (a) notify the Railway's Resource Operations Center at 1(800) 832-5452, of such discovery; (b) take safeguards necessary to protect its employees, subcontractors, agents and/or third parties; and (c) exercise due care with respect to the release, including the taking of any appropriate measure to minimize the impact of such release.

## **1.09 Personal Injury Reporting**

- **1.09.01** The Railway is required to report certain injuries as a part of compliance with Federal Railroad Administration (FRA) reporting requirements. Any personal injury sustained by an employee of the Contractor, subcontractor or Contractor's invitees while on the Railway's Property must be reported immediately (by phone mail if unable to contact in person) to the Railway's representative in charge of the project. The Non-Employee Personal Injury Data Collection Form contained herein is to be completed and sent by Fax to the Railway at 1(817) 352-7595 and to the Railway's Project Representative no later than the close of shift on the date of the injury.

**NON-EMPLOYEE PERSONAL INJURY DATA COLLECTION**

INFORMATION REQUIRED TO BE COLLECTED PURSUANT TO FEDERAL REGULATION. IT SHOULD BE USED FOR COMPLIANCE WITH FEDERAL REGULATIONS ONLY AND IS NOT INTENDED TO PRESUME ACCEPTANCE OF RESPONSIBILITY OR LIABILITY.

- 1. Accident City/St \_\_\_\_\_ 2. Date: \_\_\_\_\_ Time:  
County: \_\_\_\_\_ 3. Temperature: \_\_\_\_\_ 4. Weather  
(if non-Railway location)
- 5. Social Security #
- 6. Name (last, first, mi)
- 7. Address: Street: \_\_\_\_\_ City: \_\_\_\_\_ St. \_\_\_\_\_ Zip:
- 8. Date of Birth: \_\_\_\_\_ and/or Age \_\_\_\_\_ Gender:  
(if available)
- 9. (a) Injury: \_\_\_\_\_ (b) Body Part:  
(i.e. (a) Laceration (b) Hand)
- 11. Description of Accident (To include location, action, result, etc.):

- 12. Treatment:
  - " First Aid Only
  - " Required Medical Treatment
  - " Other Medical Treatment

- 13. Dr. Name \_\_\_\_\_ 30. Date:
- 14. Dr. Address:  
Street: \_\_\_\_\_ City: \_\_\_\_\_ St: \_\_\_\_\_ Zip:
- 15. Hospital Name:
- 16. Hospital Address:  
Street: \_\_\_\_\_ City: \_\_\_\_\_ St: \_\_\_\_\_ Zip:
- 17. Diagnosis:

**FAX TO  
RAILWAY AT (817) 352-7595  
AND COPY TO  
RAILWAY ROADMASTER FAX**



# FACT SHEET NO. 5(IL)

US Army Corps  
of Engineers  
Rock Island District

NATIONWIDE PERMITS IN ILLINOIS

EFFECTIVE DATE: MARCH 18, 2002

On January 15, 2002, the Corps of Engineers published in the Federal Register (67 FR 2077), the Final Rule for the Nationwide Permits Program under the Rivers and Harbors Act of 1899; the Clean Water Act; and the Marine Protection, Research and Sanctuaries Act. These rules became effective on March 15, 2002.

The Nationwide Permit Program is an integral part of the Corps' Regulatory Program. The Nationwide Permits are a form of general permits issued by the Chief of Engineers and are intended to apply throughout the entire United States and its territories. A listing of the nationwide permits and general conditions is included herein. We encourage prospective permit applicants to consider the advantages of nationwide permit authorization during the preliminary design of their projects. Assistance and further information regarding all aspects of the Corps of Engineers Regulatory Program may be obtained by contacting the appropriate Corps of Engineers District at the address and/or telephone number listed on the last page of this Fact Sheet.

To ensure projects authorized by a Nationwide Permit will result in minimal adverse effects to the aquatic environment, the following **Regional Conditions** were developed for projects proposed **within the state of Illinois except for Chicago District (See NOTE below)**:

1. **Bank stabilization projects involving armoring of the streambank with riprap or the construction of retaining walls within High Value Subwatersheds exceeding 250 feet will require a PCN to the Corps of Engineers in accordance with Notification Condition (Number 13).**
2. **A proposed activity to be authorized under Nationwide Permits 12 or 14 within the Cache River Wetlands Areas (Alexander and Pulaski Counties), Kaskaskia River (Clinton, St. Clair, and Washington Counties), or Wabash River (Gallatin and White Counties) will require a PCN to the Corps of Engineers in accordance with the Notification Condition (Number 13).**
3. **Stormwater management facilities shall not be located within an intermittent stream.**

**NOTE:** The Chicago District has proposed alternate regional conditions for work in McHenry, Kane, Lake, DuPage, Will and Cook Counties in Illinois. Information regarding Chicago District requirements can be accessed through their website at <http://www.lrc.usace.army.mil/co-r/>. If you have any questions regarding the Chicago District proposal, please contact Ms. Karon Marzec, Senior Project Manager, by telephone at 312/353-6400, ext. 4030 or e-mail [karon.m.marzec@usace.army.mil](mailto:karon.m.marzec@usace.army.mil).

**NOTE:** None of the Regional Conditions pertain to paragraph a. of Nationwide Permit Number 40.

Permits, issued by the Corps of Engineers, under the authority of Section 404 of the Clean Water Act may not be issued until the state (where the discharge will occur) certifies, under Section 401 of the Act, that the discharge will comply with the water quality standards of the State.

## DENIED NATIONWIDE PERMITS

The Illinois Environmental Protection Agency (IEPA) did not issue a generic water quality certification for the following nationwide permits which are listed by subject only:

15. U.S. Coast Guard Approved Bridges
16. Return Water From Upland Contained Disposal Areas
17. Hydropower Projects



18. Minor Discharges
19. Minor Dredging
21. Surface Coal Mining Activities
23. Approved Categorical Exclusions
25. Structural Discharges
30. Moist Soil Management for Wildlife
31. Maintenance of Existing Flood Control Facilities
32. Completed Enforcement Actions
33. Temporary Construction, Access and Dewatering
34. Cranberry Production Activities
37. Emergency Watershed Protection and Rehabilitation
39. Residential, Commercial, and Institutional Developments
40. Agricultural Activities
42. Recreational Facilities
43. Stormwater Management Facilities

Since Nationwide Permits 18, 19, 21, 23, 31, 32, 33, 37, and 39 are applicable under both Section 10 and 404, the State Section 401 certification is only required for discharges of pollutants under these nationwide permits. Section 10 work not involving discharges of dredged or fill material continues to be authorized under these nationwide permits.

Authorization for discharges covered by all the above nationwide permits is denied without prejudice. Applicants wishing to conduct such discharges must first obtain either an individual water quality certification or waiver from:

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY  
1021 NORTH GRAND AVENUE EAST  
POST OFFICE BOX 19276  
SPRINGFIELD, ILLINOIS 62794-9276

If the state certifying agency fails to act on an application for water quality certification within 60 days after receipt, the certification requirement is presumed to be waived. The applicant must furnish the District Engineer (at the appropriate address listed on the last page of the Fact Sheet) with a copy of the certification or proof of waiver. The discharge may proceed upon receipt of the District Engineer's determination that the discharge qualifies for authorization under this nationwide permit. Details of this procedure are contained in 33 CFR 330.4, a copy of which is available upon request.

Nationwide Permits 3, 5, 7, 12, 13, 14, 17, 18, 21, 27, 29, 31, 33, 34, 37, 38, 39, 40, 41, 42, 43, and 44 require the permittee notify the District Engineer at least 30 to 45 days prior to performing the discharge under certain circumstances. Specific instructions for these notifications are contained in General Condition 13, a copy of which is included.

#### **Nationwide Permits and Conditions**

The following is a list of the nationwide permits, authorized by the Chief of Engineers, and published in the Federal Register (67 FR 2077), (67 FR 6692) and (67 FR 8579). Permittees wishing to conduct activities under the nationwide permits must comply with the conditions published in Section C. The Nationwide Permit Conditions found in Section C have been reprinted at the end of this Fact Sheet. The parenthetical references (Section 10, Section 404) following each nationwide permit indicate the specific authorities under which that permit is issued.

#### **B. NATIONWIDE PERMITS**

**1. Aids to Navigation.** The placement of aids to navigation and Regulatory markers which are approved by and installed in accordance with the requirements of the U.S. Coast Guard (USCG)

(See 33 CFR, chapter I, subchapter C part 66). (Section 10)

**2. Structures in Artificial Canals.** Structures constructed in artificial canals within principally residential developments where the connection of the canal to navigable water of the US has been previously authorized (see 33 CFR 322.5(g)). (Section 10)

**3. Maintenance.** Activities related to:

(i) The repair, rehabilitation, or replacement of any previously authorized, currently serviceable, structure, or fill, or of any currently serviceable structure or fill authorized by 33 CFR 330.3, provided that the structure or fill is not to be put to uses differing from those uses specified or contemplated for it in the original permit or the most recently authorized modification. Minor deviations in the structure's configuration or filled area including those due to changes in materials, construction techniques, or current construction codes or safety standards which are necessary to make repair, rehabilitation, or replacement are permitted, provided the adverse environmental effects resulting from such repair, rehabilitation, or replacement are minimal. Currently

serviceable means useable as is or with some maintenance, but not so degraded as to essentially require reconstruction. This NWP authorizes the repair, rehabilitation, or replacement of those structures or fills destroyed or damaged by storms, floods, fire or other discrete events, provided the repair, rehabilitation, or replacement is commenced, or is under contract to commence, within two years of the date of their destruction or damage. In cases of catastrophic events, such as hurricanes or tornadoes, this two-year limit may be waived by the District Engineer, provided the permittee can demonstrate funding, contract, or other similar delays.

(ii) Discharges of dredged or fill material, including excavation, into all waters of the US to remove accumulated sediments and debris in the vicinity of, and within, existing structures

(e.g., bridges, culverted road crossings, water intake structures, etc.) and the placement of new or additional riprap to protect the structure, provided the permittee notifies the District Engineer in accordance with General Condition 13. The removal of sediment is limited to the minimum necessary to restore the waterway in the immediate vicinity of the structure to the approximate dimensions that existed when the structure was built, but cannot extend further than 200 feet in any direction from the structure. The placement of rip rap must be the minimum necessary to protect the structure or to ensure the safety of the structure. All excavated materials must be deposited and retained in an upland area unless otherwise specifically approved by the District Engineer under separate authorization. Any bank stabilization measures not directly associated with the structure will require a separate authorization from the District Engineer.

(iii) Discharges of dredged or fill material, including excavation, into all waters of the US for activities associated with the restoration of upland areas damaged by a storm, flood, or other discrete event, including the construction, placement, or installation of upland protection structures and minor dredging to remove obstructions in a water of the US. (Uplands lost as a result of a storm, flood, or other discrete event can be replaced without a Section 404 permit provided the uplands are restored to their original pre-event location. This NWP is for the activities in waters of the US associated with the replacement of the uplands.) The permittee must notify the District Engineer, in accordance with General Condition 13, within 12-months of the date of the damage and the work must commence, or be under contract to commence, within two years of the date of the damage. The permittee should provide evidence, such as a recent topographic survey or photographs, to justify the extent of the proposed restoration. The restoration of the damaged areas cannot exceed the contours, or ordinary high water mark, that existed before the damage. The District Engineer retains the right to determine the extent of the pre-existing conditions and the extent of any restoration work authorized by this permit. Minor dredging to remove obstructions from the adjacent waterbody is limited to 50 cubic yards below the plane of the ordinary high water mark, and is limited to the amount necessary to restore the pre-existing bottom contours of the waterbody. The dredging may not be done primarily to obtain fill for any restoration activities. The discharge of dredged or fill material and all related work needed to restore the upland must be part of a single and complete project. This permit cannot be used in conjunction with NWP 18 or NWP 19 to restore damaged upland areas. This permit cannot be used to reclaim historic lands lost, over an extended period, to normal erosion processes.

This permit does not authorize maintenance dredging for the primary purpose of navigation and beach restoration. This permit does not authorize new stream channelization or stream relocation projects. Any work authorized by this permit must not cause more than minimal degradation of water quality, more than minimal changes to the flow characteristics of the stream, or increase flooding (See General Conditions 9 and 21). (Sections 10 and 404)

Note: This NWP authorizes the repair, rehabilitation, or replacement of any previously authorized structure or fill that does not qualify for the Section 404(f) exemption for maintenance.

#### **4. Fish and Wildlife Harvesting, Enhancement, and Attraction Devices and Activities.**

Fish and wildlife harvesting devices and activities such as pound nets, crab traps, crab dredging, eel pots, lobster traps, duck blinds, clam and oyster digging; and small fish attraction devices such as open water fish concentrators (sea kites, etc.). This NWP authorizes shellfish seeding provided this activity does not occur in wetlands or sites

that support submerged aquatic vegetation (including sites where submerged aquatic vegetation is documented to exist, but may not be present in a given year.). This NWP does not authorize artificial reefs or impoundments and semi-impoundments of waters of the US for the culture or holding of motile species such as lobster or the use of covered oyster trays or clam racks. (Sections 10 and 404)

**5. Scientific Measurement Devices.** Devices, whose purpose is to measure and record scientific data such as staff gages, tide gages, water recording devices, water quality testing and improvement devices and similar structures. Small weirs and flumes constructed primarily to record water quantity and velocity are also authorized provided the discharge is limited to 25 cubic yards and further for discharges of 10 to 25 cubic yards provided the permittee notifies the District Engineer in accordance with the "Notification" General Condition. (Sections 10 and 404)

**6. Survey Activities.** Survey activities including core sampling, seismic exploratory operations, plugging of seismic shot holes and other exploratory-type bore holes, soil survey, sampling, and historic resources surveys. Discharges and structures associated with the recovery of historic resources are not authorized by this NWP. Drilling and the discharge of excavated material from test wells for oil and gas exploration is not authorized by this NWP; the plugging of such wells is authorized. Fill placed for roads, pads and other similar activities is not authorized by this NWP. The NWP does not authorize any permanent structures. The discharge of drilling mud and cuttings may require a permit under section 402 of the CWA. (Sections 10 and 404)

**7. Outfall Structures and Maintenance.** Activities related to:

(i) Construction of outfall structures and associated intake structures where the effluent from the outfall is authorized, conditionally authorized, or specifically exempted, or are otherwise in compliance with regulations issued under the National Pollutant Discharge Elimination System Program (Section 402 of the CWA), and

(ii) Maintenance excavation, including dredging, to remove accumulated sediments blocking or restricting outfall and intake structures, accumulated sediments from small impoundments associated with outfall and intake structures, and accumulated sediments from canals associated with outfall and intake structures, provided that the activity meets all of the following criteria:

a. The permittee notifies the District Engineer in accordance with General Condition 13;

b. The amount of excavated or dredged material must be the minimum necessary to restore the outfalls, intakes, small impoundments, and canals to original design capacities and design configurations (i.e., depth and width);

c. The excavated or dredged material is deposited and retained at an upland site, unless otherwise approved by the District Engineer under separate authorization; and

d. Proper soil erosion and sediment control measures are used to minimize reentry of sediments into waters of the US.

The construction of intake structures is not authorized by this NWP, unless they are directly associated with an authorized outfall structure. For maintenance excavation and dredging to remove accumulated sediments, the notification must include information regarding the original design capacities and configurations of the facility and the presence of special aquatic sites

(e.g., vegetated shallows) in the vicinity of the proposed work. (Sections 10 and 404)

**8. Oil and Gas Structures.** Structures for the exploration, production, and transportation of oil, gas, and minerals on the outer continental shelf within areas leased for such purposes by the DOI, Minerals Management Service (MMS). Such structures shall not be placed within the limits of any designated shipping safety fairway or traffic separation scheme, except temporary anchors that comply with the fairway regulations in 33 CFR 322.5(1). (Where such limits have not been designated, or where changes are anticipated, District Engineers will consider asserting discretionary authority in accordance with 33 CFR 330.4(e) and will also review such proposals to ensure they comply with the provisions of the fairway regulations in 33 CFR 322.5(1). Any Corps review under this permit will be limited to the effects on navigation and national security in accordance with 33 CFR 322.5(f)). Such structures will not be

placed in established danger zones or restricted areas as designated in 33 CFR part 334: nor will such structures be permitted in EPA or Corps designated dredged material disposal areas. (Section 10)

**9. Structures in Fleeting and Anchorage Areas.** Structures, buoys, floats and other devices placed within anchorage or fleeting areas to facilitate moorage of vessels where the USCG has established such areas for that purpose. (Section 10)

**10. Mooring Buoys.** Non-commercial, single-boat, mooring buoys. (Section 10)

**11. Temporary Recreational Structures.** Temporary buoys, markers, small floating docks, and similar structures placed for recreational use during specific events such as water skiing competitions and boat races or seasonal use provided that such structures are removed within 30 days after use has been discontinued. At Corps of Engineers reservoirs, the reservoir manager must approve each buoy or marker individually. (Section 10)

**12. Utility Line Activities.** Activities required for the construction, maintenance and repair of utility lines and associated facilities in waters of the US as follows:

(i) Utility lines: The construction, maintenance, or repair of utility lines, including outfall and intake structures and the associated excavation, backfill, or bedding for the utility lines, in all waters of the US, provided there is no change in preconstruction contours. A "utility line" is defined as any pipe or pipeline for the transportation of any gaseous, liquid, liquescent, or slurry substance, for any purpose, and any cable, line, or wire for the transmission for any purpose of electrical energy, telephone, and telegraph messages, and radio and television communication (see Note 1, below). Material resulting from trench excavation may be temporarily sidecast (up to three months) into waters of the US, provided that the material is not placed in such a manner that it is dispersed by currents or other forces. The District Engineer may extend the period of temporary side casting not to exceed a total of 180 days, where appropriate. In wetlands, the top 6" to 12" of the trench should normally be backfilled with topsoil from the trench. Furthermore, the trench cannot be constructed in such a manner as to drain waters of the US (e.g., backfilling with extensive gravel layers, creating a french drain effect). For example, utility line trenches can be backfilled with clay blocks to ensure that the trench does not drain the waters of the US through which the utility line is installed. Any exposed slopes and stream banks must be stabilized immediately upon completion of the utility line crossing of each waterbody.

(ii) Utility line substations: The construction, maintenance, or expansion of a substation facility associated with a power line or utility line in non-tidal waters of the US, excluding non-tidal wetlands adjacent to tidal waters, provided the activity does not result in the loss of greater than 1/2-acre of non-tidal waters of the US.

(iii) Foundations for overhead utility line towers, poles, and anchors: The construction or maintenance of foundations for overhead utility line towers, poles, and anchors in all waters of the US, provided the foundations are the minimum size necessary and separate footings for each tower leg (rather than a larger single pad) are used where feasible.

(iv) Access roads: The construction of access roads for the construction and maintenance of utility lines, including overhead power lines and utility line substations, in non-tidal waters of the US, excluding non-tidal wetlands adjacent to tidal waters, provided the discharges do not cause the loss of greater than 1/2-acre of non-tidal waters of the US. Access roads shall be the minimum width necessary (see Note 2, below). Access roads must be constructed so that the length of the road minimizes the adverse effects on waters of the US and as near as possible to preconstruction contours and elevations (e.g., at grade corduroy roads or geotextile/gravel roads). Access roads constructed above preconstruction contours and elevations in waters of the US must be properly bridged or culverted to maintain surface flows.

The term "utility line" does not include activities which drain a water of the US, such as drainage tile, or french drains; however, it does apply to pipes conveying drainage from another area. For the purposes of this NWP, the loss of waters of the US includes the filled area plus waters of the US that are adversely affected by flooding, excavation, or drainage as a result of the project. Activities authorized by paragraph (i) through (iv) may not exceed a total of

1/2-acre loss of waters of the US. Waters of the US temporarily affected by filling, flooding, excavation, or drainage, where the project area is restored to preconstruction contours and elevation, is not included in the calculation of permanent loss of waters of the US. This includes temporary construction mats (e.g., timber, steel, geotextile) used during construction and removed upon completion of the work. Where certain functions and values of waters of the US are permanently adversely affected, such as the conversion of a forested wetland to a herbaceous wetland in the permanently maintained utility line right-of-way, mitigation will be required to reduce the adverse effects of the project to the minimal level.

Mechanized land clearing necessary for the construction, maintenance, or repair of utility lines and the construction, maintenance and expansion of utility line substations, foundations for overhead utility lines, and access roads is authorized, provided the cleared area is kept to the minimum necessary and preconstruction contours are maintained as near as possible. The area of waters of the US that is filled, excavated, or flooded must be limited to the minimum necessary to construct the utility line, substations, foundations, and access roads. Excess material must be removed to upland areas immediately upon completion of construction. This NWP may authorize utility lines in or affecting navigable waters of the US even if there is no associated discharge of dredged or fill material (See 33 CFR part 322).

Notification: The permittee must notify the District Engineer in accordance with General Condition 13, if any of the following criteria are met:

- (a) Mechanized land clearing in a forested wetland for the utility line right-of-way;
- (b) A Section 10 permit is required;
- (c) The utility line in waters of the US, excluding overhead lines, exceeds 500 feet;
- (d) The utility line is placed within a jurisdictional area (i.e., water of the US), and it runs parallel to a stream bed that is within that jurisdictional area;
- (e) Discharges associated with the construction of utility line substations that result in the loss of greater than 1/10-acre of waters of the US;
- (f) Permanent access roads constructed above grade in waters of the US for a distance of more than 500 feet; or
- (g) Permanent access roads constructed in waters of the US with impervious materials. (Sections 10 and 404)

Note 1: Overhead utility lines constructed over Section 10 waters and utility lines that are routed in or under Section 10 waters without a discharge of dredged or fill material require a Section 10 permit; except for pipes or pipelines used to transport gaseous, liquid, liquescent, or slurry substances over navigable waters of the US, which are considered to be bridges, not utility lines, and may require a permit from the USCG pursuant to section 9 of the Rivers and Harbors Act of 1899. However, any discharges of dredged or fill material associated with such pipelines will require a Corps permit under Section 404.

Note 2: Access roads used for both construction and maintenance may be authorized, provided they meet the terms and conditions of this NWP. Access roads used solely for construction of the utility line must be removed upon completion of the work and the area restored to preconstruction contours, elevations, and wetland conditions. Temporary access roads for construction may be authorized by NWP 33.

Note 3: Where the proposed utility line is constructed or installed in navigable waters of the US (i.e., Section 10 waters), copies of the PCN and NWP verification will be sent by the Corps to the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), for charting the utility line to protect navigation.

NOTE: THE IEPA HAS CONDITIONED SECTION 401 WATER QUALITY CERTIFICATION APPLICABLE TO NATIONWIDE PERMIT 12. DEPARTMENT OF THE ARMY AUTHORIZATION PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT (33 U.S.C. 1344) UNDER NATIONWIDE PERMIT 12 WILL BE SUBJECT TO THE IEPA CONDITIONS IN ADDITION TO THE CONDITIONS PUBLISHED IN SECTION C.

Section 401 Water Quality Certification Conditions for Nationwide Permit 12, Utility Line Activities.

1. Case-specific water quality certification from the Illinois EPA will be required for activities in the following waters:

- A. Chicago Sanitary and Ship Canal
- B. Calumet-Sag Channel
- C. Little Calumet River
- D. Grand Calumet River
- E. Calumet River
- F. South Branch of the Chicago River (including the South Fork)
- G. North Branch of the Chicago River (including the East and West Forks and the Skokie Lagoons)
- H. Chicago River (Main Stem)
- I. Lake Calumet
- J. Des Plaines River
- K. Fox River (including the Fox Chain of Lakes)
- L. Saline River (in Hardin County)
- M. Richland Creek (in St. Clair and Monroe Counties)
- N. Lake Michigan
- O. Rock River (in Winnebago County)
- P. Illinois River upstream of mile 229.6 (Illinois Route 178 bridge)
- Q. Illinois River between mile 140.0 and 182.0
- R. Pettibone Creek (in Lake County)
- S. All Public and Food Processing Water Supplies with surface intake facilities (as

specified in the Illinois EPA's "List of Public and Food Processing Water Supplies Utilizing Surface Water")

2. Section 401 is hereby issued for all other waters, with the following conditions:

A. The applicant for Nationwide Permit 12 shall not cause:

- i. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulation;
- ii. water pollution defined and prohibited by the Illinois Environmental Protection Act; or
- iii. interference with water use practices near public recreation areas or water supply intakes.

B. The applicant for Nationwide Permit shall provide adequate planning and supervision during the project construction period for implementing construction methods, processes and cleanup procedures necessary to prevent water pollution and control erosion.

C. Material resulting from trench excavation within surface waters of the State may be temporarily sidecast adjacent to the trench excavation provided that:

- i. Sidecast material is not placed within a creek, stream, river or other flowing water body such that material dispersion could occur;
- ii. Side cast material is not placed within ponds or other water bodies other than wetlands; and
- iii. Sidecast material is not placed within a wetland for a period longer than twenty (20) calendar days. Such sidecast material shall either be removed from the site (refer to Condition 2.F), or used as backfill (refer to Condition 2.D and 2.E).

D. Backfill used within trenches passing through surface water of the State, except wetland areas, shall be clean course aggregate, gravel or other material which will not cause siltation, pipe damage during placement, or chemical corrosion in place. Excavated material may be used only if:

- i. Particle size analysis is conducted and demonstrates the material to be at least 80% sand or larger size material, using a #230 U.S. sieve; or

ii. Excavation and backfilling are done under dry conditions.

E. Backfill used within trenches passing through wetland areas shall consist of clean material which will not cause siltation, pipe damage during placement, or chemical corrosion in place. Excavated material shall be used to the extent practicable, with the upper six (6) to twelve (12) inches backfilled with the topsoil obtained during trench excavation.

F. All material excavated which is not being used as backfill as stipulated in Condition 2.D and 2.E shall be stored or disposed in self-contained areas with no discharge to waters of the State. Material shall be disposed of appropriately under the regulations at  
35 Il. Adm. Code Subtitle G.

G. All areas affected by construction shall be mulched and seeded as soon after construction as possible. The applicant for Nationwide 12 shall undertake necessary measures and procedures to reduce erosion during construction. Interim measures to prevent erosion during construction shall be taken and may include the installation of staked straw bales, sedimentation basins and temporary mulching. All construction within the waterway shall be conducted during zero or low flow conditions. The applicant for Nationwide 12 shall be responsible for obtaining an NPDES Storm Water Permit prior to initiating construction if the construction activity associated with the project will result in the disturbance of 5 (five) or more acres, total land area. An NPDES Storm Water Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form by certified mail to the Agency's Division of Water Pollution Control, Permit Section.

H. The applicant for Nationwide 12 shall implement erosion control measures consistent with the "Illinois Urban Manual" (IEPA/USDA, NRCS; 1995).

I. The use of directional drilling to install utility pipelines below surface waters of the State is hereby certified provided that:

- i. All pits and other construction necessary for the directional drilling process are located outside of surface waters of the State;
- ii. All drilling fluids shall be adequately contained such that they cannot make their way to surface waters of the State. Such fluids shall be treated as stipulated in Condition 2.F; and
- iii. Erosion and sediment control is provided in accordance with Conditions 2.B, 2.G, and 2.H.

**13. Bank Stabilization.** Bank stabilization activities necessary for erosion prevention provided the activity meets all of the following criteria:

- a. No material is placed in excess of the minimum needed for erosion protection;
- b. The bank stabilization activity is less than 500 feet in length;
- c. The activity will not exceed an average of one cubic yard per running foot placed along the bank below the plane of the ordinary high water mark or the high tide line;
- d. No material is placed in any special aquatic site, including wetlands;
- e. No material is of the type, or is placed in any location, or in any manner, to impair surface water flow into or out of any wetland area;
- f. No material is placed in a manner that will be eroded by normal or expected high flows (properly anchored trees and treetops may be used in low energy areas); and,
- g. The activity is part of a single and complete project.

Bank stabilization activities in excess of 500 feet in length or greater than an average of one cubic yard per running foot may be authorized if the permittee notifies the District Engineer in accordance with the "Notification" General Condition 13 and the District Engineer determines the activity complies with the other terms and conditions of the NWP and the adverse environmental effects are minimal both individually and



cumulatively. This NWP may not be used for the channelization of waters of the US. (Sections 10 and 404)

NOTE: THE IEPA HAS CONDITIONED SECTION 401 WATER QUALITY CERTIFICATION APPLICABLE TO NATIONWIDE PERMIT 13. DEPARTMENT OF THE ARMY AUTHORIZATION PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT (33 U.S.C. 1344) UNDER NATIONWIDE PERMIT 13 WILL BE SUBJECT TO THE IEPA CONDITIONS IN ADDITION TO THE CONDITIONS PUBLISHED IN SECTION C.

Section 401 Water Quality Certification Condition for Nationwide Permit 13, Bank Stabilization.

Any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all state statutes, regulations and permit requirements with no discharge to waters of the State unless a permit has been issued by the Illinois EPA. Any backfilling must be done with clean material and placed in a manner to prevent violation of applicable water quality standards. Asphalt and construction or demolition debris cannot be used as fill or bank stabilization material.

**14. Linear Transportation Projects.** Activities required for the construction, expansion, modification, or improvement of linear transportation crossings (e.g., highways, railways, trails, airport runways, and taxiways) in waters of the US, including wetlands, if the activity meets the following criteria:

- a. This NWP is subject to the following acreage limits:
  - (1) For linear transportation projects in non-tidal waters, provided the discharge does not cause the loss of greater than 1/2-acre of waters of the US; or
  - (2) For linear transportation projects in tidal waters, provided the discharge does not cause the loss of greater than 1/3-acre of waters of the US.
- b. The permittee must notify the District Engineer in accordance with General Condition 13 if any of the following criteria are met:
  - (1) The discharge causes the loss of greater than 1/10-acre of waters of the US; or
  - (2) There is a discharge in a special aquatic site, including wetlands;
- c. The notification must include a compensatory mitigation proposal to offset permanent losses of waters of the US to ensure that those losses result only in minimal adverse effects to the aquatic environment and a statement describing how temporary losses will be minimized to the maximum extent practicable;
- d. For discharges in special aquatic sites, including wetlands, and stream riffle and pool complexes, the notification must include a delineation of the affected special aquatic sites;
- e. The width of the fill is limited to the minimum necessary for the crossing;
- f. This permit does not authorize stream channelization, and the authorized activities must not cause more than minimal changes to the hydraulic flow characteristics of the stream, increase flooding, or cause more than minimal degradation of water quality of any stream (see General Conditions 9 and 21);
- g. This permit cannot be used to authorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, train stations, or aircraft hangars; and
- h. The crossing is a single and complete project for crossing waters of the US. Where a road segment (i.e., the shortest segment of a road with independent utility that is part of a larger project) has multiple crossings of streams (several single and complete projects) the Corps will consider whether it should use its discretionary authority to require an Individual Permit. (Sections 10 and 404)

Note: Some discharges for the construction of farm roads, forest roads, or temporary roads for moving mining equipment may be eligible for an exemption from the need for a Section 404 permit (see 33 CFR 323.4).

NOTE: THE IEPA HAS CONDITIONED SECTION 401 WATER QUALITY CERTIFICATION APPLICABLE TO NATIONWIDE PERMIT 14. DEPARTMENT OF THE ARMY AUTHORIZATION PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT (33 U.S.C. 1344) UNDER NATIONWIDE PERMIT 14 WILL BE SUBJECT TO THE IEPA CONDITIONS IN ADDITION TO THE CONDITIONS PUBLISHED IN SECTION C.

Section 401 Water Quality Certification Conditions for Nationwide Permit 14, Linear Transportation Projects.

1. The affected area of the stream channel shall not exceed 100 linear feet, as measured along the stream corridor.
2. Temporary runarounds shall be constructed of clean course aggregate.
3. Any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all state statutes, as determined by the Illinois EPA.
4. Any backfilling must be done with clean material and placed in a manner to prevent violation of applicable water quality standards.
5. The applicant shall not cause:
  - A. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulation;
  - B. water pollution defined and prohibited by the Illinois Environmental Protection Act; or
  - C. interference with water use practices near public recreation areas or water supply intakes.
6. All areas affected by construction shall be mulched and seeded as soon after construction as possible. The applicant shall undertake necessary measures and procedures to reduce erosion during construction. Interim measures to prevent erosion during construction shall be taken and may include the installation of staked straw bales, sedimentation basins and temporary mulching. All construction within the waterway shall be conducted during zero or low flow conditions. The applicant shall be responsible for obtaining an NPDES Storm Water Permit prior to initiating construction if the construction activity associated with the project will result in the disturbance of 5 (five) or more acres, total land area. An NPDES Storm Water Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form by certified mail to the Agency's Division of Water Pollution Control, Permit Section.
7. The applicant shall implement erosion control measures consistent with the "Illinois Urban Manual" (IEPA/USDA, NRCS; 1995).

**\*\*\* 15. U.S. Coast Guard Approved Bridges.** Discharges of dredged or fill material incidental to the construction of bridges across navigable waters of the US, including cofferdams, abutments, foundation seals, piers, and temporary construction and access fills provided such discharges have been authorized by the USCG as part of the bridge permit. Causeways and approach fills are not included in this NWP and will require an individual or regional Section 404 permit. (Section 404)

**\*\*\* 16. Return Water From Upland Contained Disposal Areas.** Return water from upland, contained dredged material disposal area. The dredging itself may require a Section 404 permit (33 CFR 323.2(d)), but will require a Section 10 permit if located in navigable waters of the US. The return water from a contained disposal area is administratively defined as a discharge of dredged material by 33 CFR 323.2(d), even though the disposal itself occurs on the upland and does not require a Section 404 permit. This NWP satisfies the technical requirement for a Section 404 permit for the return water where the quality of the return water is controlled by the state through the Section 401 certification procedures. (Section 404)

**\*\*\* 17. Hydropower Projects.** Discharges of dredged or fill material associated with (a) small hydropower projects at existing reservoirs where the project, which includes the fill, are licensed by the Federal Energy Regulatory Commission (FERC) under the Federal Power Act of 1920, as amended; and has a total generating capacity of not more than 5000 kW; and the permittee notifies the District Engineer in accordance with the "Notification" General Condition; or

(b) hydropower projects for which the FERC has granted an exemption from licensing pursuant to section 408 of the Energy Security Act of 1980 (16 U.S.C. 2705 and 2708) and section 30 of the Federal Power Act, as amended; provided the permittee notifies the District Engineer in accordance with the "Notification" General Condition. (Section 404)

**\*\*\* 18. Minor Discharges.** Minor discharges of dredged or fill material into all waters of the US if the activity meets all of the following criteria:

a. The quantity of discharged material and the volume of area excavated do not exceed 25 cubic yards below the plane of the ordinary high water mark or the high tide line;

b. The discharge, including any excavated area, will not cause the loss of more than 1/10-acre of a special aquatic site, including wetlands. For the purposes of this NWP, the acreage limitation includes the filled area and excavated area plus special aquatic sites that are adversely affected by flooding and special aquatic sites that are drained so that they would no longer be a water of the US as a result of the project;

c. If the discharge, including any excavated area, exceeds 10 cubic yards below the plane of the ordinary high water mark or the high tide line or if the discharge is in a special aquatic site, including wetlands, the permittee notifies the District Engineer in accordance with the "Notification" General Condition. For discharges in special aquatic sites, including wetlands, the notification must also include a delineation of affected special aquatic sites, including wetlands (also see 33 CFR 330.1(e)); and

d. The discharge, including all attendant features, both temporary and permanent, is part of a single and complete project and is not placed for the purpose of a stream diversion.

(Sections 10 and 404)

**\*\*\* 19. Minor Dredging.** Dredging of no more than 25 cubic yards below the plane of the ordinary high water mark or the mean high water mark from navigable waters of the US (i.e., Section 10 waters) as part of a single and complete project. This NWP does not authorize the dredging or degradation through siltation of coral reefs, sites that support submerged aquatic vegetation (including sites where submerged aquatic vegetation is documented to exist, but may not be present in a given year), anadromous fish spawning areas, or wetlands, or the connection of canals or other artificial waterways to navigable waters of the US (see 33 CFR 322.5(g)). (Sections 10 and 404)

**20. Oil Spill Cleanup.** Activities required for the containment and cleanup of oil and hazardous substances which are subject to the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR part 300) provided that the work is done in accordance with the Spill Control and Countermeasure Plan required by 40 CFR 112.3 and any existing state contingency plan and provided that the Regional Response Team (if one exists in the area) concurs with the proposed containment and cleanup action. (Sections 10 and 404)

**\*\*\* 21. Surface Coal Mining Activities.** Discharges of dredged or fill material into waters of the US associated with surface coal mining and reclamation operations provided the coal mining activities are authorized by the DOI, Office of Surface Mining (OSM), or by states with approved programs under Title V of the Surface Mining Control and Reclamation Act of 1977 and provided the permittee notifies the District Engineer in accordance with the "Notification" General Condition. In addition, to be authorized by this NWP, the District Engineer must determine that the activity complies with the terms and conditions of the NWP and that the adverse environmental effects are minimal both individually and cumulatively and must notify the project sponsor of this determination in writing. The Corps, at the discretion of the District Engineer, may require a bond to ensure success of the mitigation, if no other Federal or state agency has required one. For discharges in special aquatic sites, including wetlands, and stream riffle and pool complexes, the notification must also include a delineation of affected special aquatic sites, including wetlands. (also, see 33 CFR 330.1(e))

Mitigation: In determining the need for as well as the level and type of mitigation, the District Engineer will ensure no more than minimal adverse effects to the aquatic

environment occur. As such, District Engineers will determine on a case-by-case basis the requirement for adequate mitigation to ensure the effects to aquatic systems are minimal. In cases where OSM or the state has required mitigation for the loss of aquatic habitat, the Corps may consider this in determining appropriate mitigation under Section 404. (Sections 10 and 404)

**22. Removal of Vessels.** Temporary structures or minor discharges of dredged or fill material required for the removal of wrecked, abandoned, or disabled vessels, or the removal of man-made obstructions to navigation. This NWP does not authorize the removal of vessels listed or determined eligible for listing on the National Register of Historic Places unless the District Engineer is notified and indicates that there is compliance with the "Historic Properties" General Condition. This NWP does not authorize maintenance dredging, shoal removal, or riverbank snagging. Vessel disposal in waters of the US may need a permit from EPA (see 40 CFR 229.3). (Sections 10 and 404)

**\*\*\* 23. Approved Categorical Exclusions.** Activities undertaken, assisted, authorized, regulated, funded, or financed, in whole or in part, by another Federal agency or department where that agency or department has determined, pursuant to the Council on Environmental Quality Regulation for Implementing the Procedural Provisions of the National Environmental Policy Act (NEPA) (40 CFR part 1500 et seq.), that the activity, work, or discharge is categorically excluded from environmental documentation, because it is included within a category of actions which neither individually nor cumulatively have a significant effect on the human environment, and the Office of the Chief of Engineers (ATTN: CECW-OR) has been furnished notice of the agency's or department's application for the categorical exclusion and concurs with that determination. Before approval for purposes of this NWP of any agency's categorical exclusions, the Chief of Engineers will solicit public comment. In addressing these comments, the Chief of Engineers may require certain conditions for authorization of an agency's categorical exclusions under this NWP. (Sections 10 and 404)

**24. State Administered Section 404 Program.** Any activity permitted by a state administering its own Section 404 permit program pursuant to 33 U.S.C. 1344(g)-(1) is permitted pursuant to section 10 of the Rivers and Harbors Act of 1899. Those activities that do not involve a Section 404 state permit are not included in this NWP, but certain structures will be exempted by section 154 of Pub. L. 94-587, 90 Stat. 2917 (33 U.S.C. 591) (see 33 CFR 322.3(a)(2)). (Section 10)

**\*\*\* 25. Structural Discharges.** Discharges of material such as concrete, sand, rock, etc., into tightly sealed forms or cells where the material will be used as a structural member for standard pile supported structures, such as bridges, transmission line footings, and walkways or for general navigation, such as mooring cells, including the excavation of bottom material from within the form prior to the discharge of concrete, sand, rock, etc. This NWP does not authorize filled structural members that would support buildings, building pads, homes, house pads, parking areas, storage areas and other such structures. The structure itself may require a Section 10 permit if located in navigable waters of the US. (Section 404)

**26. [Reserved]**

**27. Stream and Wetland Restoration Activities.** Activities in waters of the US associated with the restoration of former waters, the enhancement of degraded tidal and non-tidal wetlands and riparian areas, the creation of tidal and non-tidal wetlands and riparian areas, and the restoration and enhancement of non-tidal streams and non-tidal open water areas as follows:

(a) The activity is conducted on:

(1) Non-Federal public lands and private lands, in accordance with the terms and conditions of a binding wetland enhancement, restoration, or creation agreement between the landowner and the U.S. Fish and Wildlife Service (FWS) or the Natural Resources Conservation Service (NRCS), the National Marine Fisheries Service, the National Ocean

Service, or voluntary wetland restoration, enhancement, and creation actions documented by the NRCS pursuant to NRCS regulations; or

(2) Reclaimed surface coal mine lands, in accordance with a Surface Mining Control and Reclamation Act permit issued by the OSM or the applicable state agency (the future reversion does not apply to streams or wetlands created, restored, or enhanced as mitigation for the mining impacts, nor naturally due to hydrologic or topographic features, nor for a mitigation bank); or

(3) Any other public, private or tribal lands;

(b) Notification: For activities on any public or private land that are not described by paragraphs (a)(1) or (a)(2) above, the permittee must notify the District Engineer in accordance with General Condition 13; and

(c) Planting of only native species should occur on the site.

Activities authorized by this NWP include, to the extent that a Corps permit is required, but are not limited to: the removal of accumulated sediments; the installation, removal, and maintenance of small water control structures, dikes, and berms; the installation of current deflectors; the enhancement, restoration, or creation of riffle and pool stream structure; the placement of in-stream habitat structures; modifications of the stream bed and/or banks to restore or create stream meanders; the backfilling of artificial channels and drainage ditches; the removal of existing drainage structures; the construction of small nesting islands; the construction of open water areas; the construction of oyster habitat over unvegetated bottom in tidal waters; activities needed to reestablish vegetation, including plowing or discing for seed bed preparation and the planting of appropriate wetland species; mechanized land clearing to remove non-native invasive, exotic or nuisance vegetation; and other related activities.

This NWP does not authorize the conversion of a stream to another aquatic use, such as the creation of an impoundment for waterfowl habitat. This NWP does not authorize stream channelization. This NWP does not authorize the conversion of natural wetlands to another aquatic use, such as creation of waterfowl impoundments where a forested wetland previously existed. However, this NWP authorizes the relocation of non-tidal waters, including non-tidal wetlands, on the project site provided there are net gains in aquatic resource functions and values. For example, this NWP may authorize the creation of an open water impoundment in a non-tidal emergent wetland, provided the non-tidal emergent wetland is replaced by creating that wetland type on the project site. This NWP does not authorize the relocation of tidal waters or the conversion of tidal waters, including tidal wetlands, to other aquatic uses, such as the conversion of tidal wetlands into open water impoundments.

Reversion. For enhancement, restoration, and creation projects conducted under paragraphs (a)(3), this NWP does not authorize any future discharge of dredged or fill material associated with the reversion of the area to its prior condition. In such cases a separate permit would be required for any reversion. For restoration, enhancement, and creation projects conducted under paragraphs (a)(1) and (a)(2), this NWP also authorizes any future discharge of dredged or fill material associated with the reversion of the area to its documented prior condition and use (i.e., prior to the restoration, enhancement, or creation activities). The reversion must occur within five years after expiration of a limited term wetland restoration or creation agreement or permit, even if the discharge occurs after this NWP expires. This NWP also authorizes the reversion of wetlands that were restored, enhanced, or created on prior-converted cropland that has not been abandoned, in accordance with a binding agreement between the landowner and NRCS or FWS (even though the restoration, enhancement, or creation activity did not require a Section 404 permit). The five-year reversion limit does not apply to agreements without time limits reached under paragraph (a)(1). The prior condition will be documented in the original agreement or permit, and the determination of return to prior conditions will be made by the Federal agency or appropriate state agency executing the agreement or permit. Before any reversion activity the permittee or the appropriate Federal or state agency must notify the District Engineer and include the documentation of the prior condition. Once an area has reverted to its prior physical condition, it will be subject to whatever the Corps Regulatory requirements will be at that future date. (Sections 10 and 404)

Note: Compensatory mitigation is not required for activities authorized by this NWP, provided the authorized work results in a net increase in aquatic resource functions and values in the project area. This NWP can be used to authorize compensatory mitigation projects, including mitigation banks, provided the permittee notifies the District

Engineer in accordance with General Condition 13, and the project includes compensatory mitigation for impacts to waters of the US caused by the authorized work. However, this NWP does not authorize the reversion of an area used for a compensatory mitigation project to its prior condition. NWP 27 can be used to authorize impacts at a mitigation bank, but only in circumstances where it has been approved under the Interagency Federal Mitigation Bank Guidelines.

NOTE: THE IEPA HAS CONDITIONED SECTION 401 WATER QUALITY CERTIFICATION APPLICABLE TO NATIONWIDE PERMIT 27. DEPARTMENT OF THE ARMY AUTHORIZATION PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT (33 U.S.C. 1344) UNDER NATIONWIDE PERMIT 27 WILL BE SUBJECT TO THE IEPA CONDITIONS IN ADDITION TO THE CONDITIONS PUBLISHED IN SECTION C.

Section 401 Water Quality Certification Condition for Nationwide Permit 27, Stream and Wetland Restoration Activities. All activities conducted under NWP 27 shall be in accordance with the provisions of 35 Il. Adm. Code 405.108. Work in reclaimed surface coal mine areas are required to obtain prior authorization from the Illinois EPA for any activities that result in the use of acid-producing mine refuse.

**28. Modifications of Existing Marinas.** Reconfiguration of existing docking facilities within an authorized marina area. No dredging, additional slips, dock spaces, or expansion of any kind within waters of the US is authorized by this NWP. (Section 10)

**29. Single-family Housing.** Discharges of dredged or fill material into non-tidal waters of the US, including non-tidal wetlands for the construction or expansion of a single-family home and attendant features (such as a garage, driveway, storage shed, and/or septic field) for an Individual Permittee provided that the activity meets all of the following criteria:

a. The discharge does not cause the loss of more than 1/4-acre of non-tidal waters of the US, including non-tidal wetlands;

b. The permittee notifies the District Engineer in accordance with the "Notification" General Condition;

c. The permittee has taken all practicable actions to minimize the on-site and off-site impacts of the discharge. For example, the location of the home may need to be adjusted on-site to avoid flooding of adjacent property owners;

d. The discharge is part of a single and complete project; furthermore, that for any subdivision created on or after November 22, 1991, the discharges authorized under this NWP may not exceed an

aggregate total loss of waters of the US of 1/4-acre for the entire subdivision;

e. An individual may use this NWP only for a single-family home for a personal residence;

f. This NWP may be used only once per parcel;

g. This NWP may not be used in conjunction with NWP 14 or NWP 18, for any parcel; and,

h. Sufficient vegetated buffers must be maintained adjacent to all open water bodies, streams, etc., to preclude water quality degradation due to erosion and sedimentation.

For the purposes of this NWP, the acreage of loss of waters of the US includes the filled area previously permitted, the proposed filled area, and any other waters of the US that are adversely affected by flooding, excavation, or drainage as a result of the project. This NWP authorizes activities only by individuals; for this purpose, the term "individual" refers to a natural person and/or a married couple, but does not include a corporation, partnership, or similar entity. For the purposes of this NWP, a parcel of land is defined as "the entire contiguous quantity of land in possession of, recorded as property of, or owned (in any form of ownership, including land owned as a partner, corporation, joint tenant, etc.) by the same individual (and/or that individual's spouse), and comprises not only the area of wetlands sought to be filled, but also all land contiguous to those wetlands, owned by the individual (and/or that individual's spouse) in any form of ownership." (Sections 10 and 404)

NOTE: THE IEPA HAS CONDITIONED SECTION 401 WATER QUALITY CERTIFICATION APPLICABLE TO NATIONWIDE PERMIT 29. DEPARTMENT OF THE ARMY AUTHORIZATION PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT (33 U.S.C. 1344) UNDER NATIONWIDE PERMIT 29 WILL BE SUBJECT TO THE IEPA CONDITIONS IN ADDITION TO THE CONDITIONS PUBLISHED IN SECTION C.

Section 401 Water Quality Certification Conditions for Nationwide Permit 29, Single-family Housing.

1. The applicant shall not cause:
  - A. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulation;
  - B. water pollution defined and prohibited by the Illinois Environmental Protection Act; or
  - C. interference with water use practices near public recreation areas or water supply intakes.
2. The NWP applicant shall provide adequate planning and supervision during the project construction period for implementing construction methods, processes and cleanup procedures necessary to prevent water pollution and control erosion.
3. Any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all state statutes, regulations and permit requirements with no discharge to waters of the State unless a permit has been issued by the Illinois EPA. Any backfilling must be done with clean material and placed in a manner to prevent violation of applicable water quality standards.
4. All areas affected by construction shall be mulched and seeded as soon after construction as possible. The NWP applicant shall undertake necessary measures and procedures to reduce erosion during construction. Interim measures to prevent erosion during construction shall be taken and may include the installation of staked straw bales, sedimentation basins and temporary mulching. All construction within the waterway shall be conducted during zero or low flow conditions. The applicant shall be responsible for obtaining an NPDES Storm Water Permit prior to initiating construction if the construction activity associated with the project will result in the disturbance of 5 (five) or more acres, total land area. An NPDES Storm Water Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form by certified mail to the Agency's Division of Water Pollution Control, Permit Section.
5. The applicant shall implement erosion control measures consistent with the "Illinois Urban Manual" (IEPA/USDA, NRCS; 1995).
6. This NWP is not valid for the placement of fill for the installation of wastewater soil treatment (septic) systems unless a project-specific Section 401 water quality certification is obtained in writing from the Illinois EPA.

**\*\*\* 30. Moist Soil Management for Wildlife.** Discharges of dredged or fill material and maintenance activities that are associated with moist soil management for wildlife performed on non-tidal Federally-owned or managed, state-owned or managed property, and local government agency-owned or managed property, for the purpose of continuing ongoing, site-specific, wildlife management activities where soil manipulation is used to manage habitat and feeding areas for wildlife. Such activities include, but are not limited to: The repair, maintenance or replacement of existing water control structures; the repair or maintenance of dikes; and plowing or discing to impede succession, prepare seed beds, or establish fire breaks. Sufficient vegetated buffers must be maintained adjacent to all open water bodies, streams, etc., to preclude water quality degradation due to erosion and sedimentation. This NWP does not authorize the construction of new dikes, roads, water control structures, etc. associated with the management areas. This NWP does not authorize converting wetlands to uplands, impoundments or other open water bodies. (Section 404)

**\*\*\* 31. Maintenance of Existing Flood Control Facilities.** Discharge of dredge or fill material resulting from activities associated with the maintenance of existing flood control facilities, including debris basins, retention/detention basins, and channels that

(i) were previously authorized by the Corps by Individual Permit, General Permit, by 33 CFR 330.3, or did not require a permit at the time it was constructed, or

(ii) were constructed by the Corps and transferred to a non-Federal sponsor for operation and maintenance. Activities authorized by this NWP are limited to those resulting from maintenance activities that are conducted within the "maintenance baseline," as described in the definition below. Activities including the discharges of dredged or fill materials, associated with maintenance activities in flood control facilities in any watercourse that has previously been determined to be within the maintenance baseline, are authorized under this NWP. The NWP does not authorize the removal of sediment and associated vegetation from the natural water courses except to the extent that these have been included in the maintenance baseline. All dredged material must be placed in an upland site or an authorized disposal site in waters of the US, and proper siltation controls must be used. (Activities of any kind that result in only incidental fallback, or only the cutting and removing of vegetation above the ground, e.g., mowing, rotary cutting, and chainsawing, where the activity neither substantially disturbs the root system nor involves mechanized pushing, dragging, or other similar activities that redeposit excavated soil material, do not require a Section 404 permit in accordance with 33 CFR 323.2(d)(2)).

Notification: After the maintenance baseline is established, and before any maintenance work is conducted, the permittee must notify the District Engineer in accordance with the "Notification" General Condition. The notification may be for activity-specific maintenance or for maintenance of the entire flood control facility by submitting a five year (or less) maintenance plan.

Maintenance Baseline: The maintenance baseline is a description of the physical characteristics (e.g., depth, width, length, location, configuration, or design flood capacity, etc.) of a flood control project within which maintenance activities are normally authorized by NWP 31, subject to any case-specific conditions required by the District Engineer. The District Engineer will approve the maintenance baseline based on the approved or constructed capacity of the flood control facility, whichever is smaller, including any areas where there are no constructed channels, but which are part of the facility. If no evidence of the constructed capacity exist, the approved constructed capacity will be used. The prospective permittee will provide documentation of the physical characteristics of the flood control facility (which will normally consist of as-built or approved drawings) and documentation of the design capacities of the flood control facility. The documentation will also include BMPs to ensure that the impacts to the aquatic environment are minimal, especially in maintenance areas where there are no constructed channels. (The Corps may request maintenance records in areas where there has not been recent maintenance.) Revocation or modification of the final determination of the maintenance baseline can only be done in accordance with 33 CFR 330.5. Except in emergencies as described below, this NWP can not be used until the District Engineer approves the maintenance baseline and determines the need for mitigation and any regional or activity-specific conditions. Once determined, the maintenance baseline will remain valid for any subsequent reissuance of this NWP. This permit does not authorize maintenance of a flood control facility that has been abandoned. A flood control facility will be considered abandoned if it has operated at a significantly reduced capacity without needed maintenance being accomplished in a timely manner.

Mitigation: The District Engineer will determine any required mitigation one-time only for impacts associated with maintenance work at the same time that the maintenance baseline is approved. Such one-time mitigation will be required when necessary to ensure that adverse environmental impacts are no more than minimal, both individually and cumulatively. Such mitigation will only be required once for any specific reach of a flood control project. However, if one-time mitigation is required for impacts associated with maintenance activities, the District Engineer will not delay needed maintenance, provided the District Engineer and the permittee establish a schedule for identification, approval, development, construction and completion of any such required mitigation. Once the one-time mitigation described above has been completed, or a determination made that mitigation is not required, no further mitigation will be required for maintenance activities within the maintenance baseline. In determining



appropriate mitigation, the District Engineer will give special consideration to natural water courses that have been included in the maintenance baseline and require compensatory mitigation and/or BMPs as appropriate.

Emergency Situations: In emergency situations, this NWP may be used to authorize maintenance activities in flood control facilities for which no maintenance baseline has been approved. Emergency situations are those which would result in an unacceptable hazard to life, a significant loss of property, or an immediate, unforeseen, and significant economic hardship if action is not taken before a maintenance baseline can be approved. In such situations, the determination of mitigation requirements, if any, may be deferred until the emergency has been resolved. Once the emergency has ended, a maintenance baseline must be established expeditiously, and mitigation, including mitigation for maintenance conducted during the emergency, must be required as appropriate. (Sections 10 and 404)

**\*\*\* 32. Completed Enforcement Actions.** Any structure, work or discharge of dredged or fill material, remaining in place, or undertaken for mitigation, restoration, or environmental benefit in compliance with either:

(i) The terms of a final written Corps non-judicial settlement agreement resolving a violation of section 404 of the CWA and/or section 10 of the Rivers and Harbors Act of 1899; or the terms of an EPA 309(a) order on consent resolving a violation of section 404 of the CWA, provided that:

a. The unauthorized activity affected no more than 5 acres of non-tidal wetlands or 1 acre of tidal wetlands;

b. The settlement agreement provides for environmental benefits, to an equal or greater degree, than the environmental detriments caused by the unauthorized activity that is authorized by this NWP; and

c. The District Engineer issues a verification letter authorizing the activity subject to the terms and conditions of this NWP and the settlement agreement, including a specified completion date; or

(ii) The terms of a final Federal court decision, consent decree, or settlement agreement resulting from an enforcement action brought by the U.S. under section 404 of the CWA and/or section 10 of the Rivers and Harbors Act of 1899; or

(iii) The terms of a final court decision, consent decree, settlement agreement, or non-judicial settlement agreement resulting from a natural resource damage claim brought by a trustee or trustees for natural resources (as defined by the National Contingency Plan at 40 CFR subpart G) under section 311 of the Clean Water Act (CWA), section 107 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA or Superfund), section 312 of the National Marine Sanctuaries Act (NMSA), section 1002 of the Oil Pollution Act of 1990 (OPA), or the Park System Resource Protection Act at 16 U.S.C. '19jj, to the extent that a Corps permit is required.

For either (i), (ii) or (iii) above, compliance is a condition of the NWP itself. Any authorization under this NWP is automatically revoked if the permittee does not comply with the terms of this NWP or the terms of the court decision, consent decree, or judicial/non-judicial settlement agreement or fails to complete the work by the specified completion date. This NWP does not apply to any activities occurring after the date of the decision, decree, or agreement that are not for the purpose of mitigation, restoration, or environmental benefit. Before reaching any settlement agreement, the Corps will ensure compliance with the provisions of 33 CFR part 326 and 33 CFR 330.6 (d)(2) and (e). (Sections 10 and 404)

**\*\*\* 33. Temporary Construction, Access and Dewatering.** Temporary structures, work and discharges, including cofferdams, necessary for construction activities or access fills or dewatering of construction sites; provided that the associated primary activity is authorized by the Corps of Engineers or the USCG, or for other construction activities not subject to the Corps or USCG regulations. Appropriate measures must be taken to maintain near normal downstream flows and to minimize flooding. Fill must be of materials, and placed in a manner, that will not be eroded by expected high flows. The use of dredged material may be allowed if it is determined by the District Engineer that it will not cause more than minimal adverse effects on aquatic resources. Temporary fill must be entirely removed to upland areas, or dredged material returned to its original location, following completion of the construction activity, and the affected areas must

be restored to the pre-project conditions. Cofferdams cannot be used to dewater wetlands or other aquatic areas to change their use. Structures left in place after cofferdams are removed require a Section 10 permit if located in navigable waters of the U.S. (See 33 CFR part 322). The permittee must notify the District Engineer in accordance with the "Notification" General Condition. The notification must also include a restoration plan of reasonable measures to avoid and minimize adverse effects to aquatic resources. The District Engineer will add Special Conditions, where necessary, to ensure environmental adverse effects is minimal. Such conditions may include: limiting the temporary work to the minimum necessary; requiring seasonal restrictions; modifying the restoration plan; and requiring alternative construction methods (e.g. construction mats in wetlands where practicable.).  
(Sections 10 and 404)

**\*\*\* 34. Cranberry Production Activities.** Discharges of dredged or fill material for dikes, berms, pumps, water control structures or leveling of cranberry beds associated with expansion, enhancement, or modification activities at existing cranberry production operations provided that the activity meets all of the following criteria:

- a. The cumulative total acreage of disturbance per cranberry production operation, including but not limited to, filling, flooding, ditching, or clearing, does not exceed 10 acres of waters of the U.S., including wetlands;
- b. The permittee notifies the District Engineer in accordance with the "Notification" General Condition. The notification must include a delineation of affected special aquatic sites, including wetlands; and,
- c. The activity does not result in a net loss of wetland acreage. This NWP does not authorize any discharge of dredged or fill material related to other cranberry production activities such as warehouses, processing facilities, or parking areas. For the purposes of this NWP, the cumulative total of 10 acres will be measured over the period that this NWP is valid. (Section 404)

**35. Maintenance Dredging of Existing Basins.** Excavation and removal of accumulated sediment for maintenance of existing marina basins, access channels to marinas or boat slips, and boat slips to previously authorized depths or controlling depths for ingress/egress, whichever is less, provided the dredged material is disposed of at an upland site and proper siltation controls are used. (Section 10)

- 36. Boat Ramps.** Activities required for the construction of boat ramps provided:
- a. The discharge into waters of the U.S. does not exceed 50 cubic yards of concrete, rock, crushed stone or gravel into forms, or placement of pre-cast concrete planks or slabs. (Unsuitable material that causes unacceptable chemical pollution or is structurally unstable is not authorized);
  - b. The boat ramp does not exceed 20 feet in width;
  - c. The base material is crushed stone, gravel or other suitable material;
  - d. The excavation is limited to the area necessary for site preparation and all excavated material is removed to the upland; and,
  - e. No material is placed in special aquatic sites, including wetlands.

Dredging to provide access to the boat ramp may be authorized by another NWP, Regional General Permit, or Individual Permit pursuant to Section 10 if located in navigable waters of the U.S. (Sections 10 and 404)

**\*\*\* 37. Emergency Watershed Protection and Rehabilitation.** Work done by or funded by:

- a. The NRCS which is a situation requiring immediate action under its emergency Watershed Protection Program (7 CFR part 624); or
- b. The USFS under its Burned-Area Emergency Rehabilitation Handbook (FSH 509.13); or
- c. The DOI for wildland fire management burned area emergency stabilization and rehabilitation (DOI Manual part 620, Ch. 3).

For all of the above provisions, the District Engineer must be notified in accordance with the General Condition 13. (Also, see 33 CFR 330.1(e)). (Sections 10 and 404)

**38. Cleanup of Hazardous and Toxic Waste.** Specific activities required to effect the containment, stabilization, or removal of hazardous or toxic waste materials that are performed, ordered, or sponsored by a government agency with established legal or regulatory authority provided the permittee notifies the District Engineer in accordance with the "Notification" General Condition. For discharges in special aquatic sites,

including wetlands, the notification must also include a delineation of affected special aquatic sites, including wetlands. Court ordered remedial action plans or related settlements are also authorized by this NWP. This NWP does not authorize the establishment of new disposal sites or the expansion of existing sites used for the disposal of hazardous or toxic waste. Activities undertaken entirely on a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) site by authority of CERCLA as approved or required by EPA, are not required to obtain permits under section 404 of the CWA or section 10 of the Rivers and Harbors Act. (Sections 10 and 404)

NOTE: THE IEPA HAS CONDITIONED SECTION 401 WATER QUALITY CERTIFICATION APPLICABLE TO NATIONWIDE PERMIT 38. DEPARTMENT OF THE ARMY AUTHORIZATION PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT (33 U.S.C. 1344) UNDER NATIONWIDE PERMIT 38 WILL BE SUBJECT TO THE IEPA CONDITIONS IN ADDITION TO THE CONDITIONS PUBLISHED IN SECTION C.

Section 401 Water Quality Certification Conditions for Nationwide Permit 38, Cleanup of Hazardous and Toxic Waste.

1. The applicant shall not cause:

- A. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulation;
- B. water pollution defined and prohibited by the Illinois Environmental Protection Act; or
- C. interference with water use practices near public recreation areas or water supply intakes.

2. In addition to any actions required of the NWP applicant with respect to the "Notification" General Condition 13, the applicant shall notify the Illinois EPA, Bureau of Water, of the specific activity. This notification shall include information concerning the orders and approvals that have been or will be obtained from the Illinois EPA Bureau of Land (BOL), for all cleanup activities under BOL jurisdiction or for which authorization or approval is sought from BOL for no further remedial action.

3. This Nationwide Permit is not valid for activities that do not require or will not receive authorization or approval from the BOL.

**\*\*\* 39. Residential, Commercial, and Institutional Developments.** Discharges of dredged or fill material into non-tidal waters of the U.S., excluding non-tidal wetlands adjacent to tidal waters, for the construction or expansion of residential, commercial, and institutional building foundations and building pads and attendant features that are necessary for the use and maintenance of the structures. Attendant features may include, but are not limited to, roads, parking lots, garages, yards, utility lines, stormwater management facilities, and recreation facilities such as playgrounds, playing fields, and golf courses (provided the golf course is an integral part of the residential development). The construction of new ski areas or oil and gas wells is not authorized by this NWP.

Residential developments include multiple and single unit developments. Examples of commercial developments include retail stores, industrial facilities, restaurants, business parks, and shopping centers. Examples of institutional developments include schools, fire stations, government office buildings, judicial buildings, public works buildings, libraries, hospitals, and places of worship. The activities listed above are authorized, provided the activities meet all of the following criteria:

- a. The discharge does not cause the loss of greater than 1/2-acre of non-tidal waters of the U.S., excluding non-tidal wetlands adjacent to tidal waters;
- b. The discharge does not cause the loss of greater than 300 linear-feet of a stream bed, unless for intermittent stream beds this criterion is waived in writing pursuant to a determination by the District Engineer, as specified below, that the project complies with all terms and conditions of this NWP and that any adverse impacts of the project on the aquatic environment are minimal, both individually and cumulatively;
- c. The permittee must notify the District Engineer in accordance with General Condition 13, if any of the following criteria are met:

(1) The discharge causes the loss of greater than 1/10-acre of non-tidal waters of the US, excluding non-tidal wetlands adjacent to tidal waters; or

(2) The discharge causes the loss of any open waters, including perennial or intermittent streams, below the ordinary high water mark (see Note, below); or

(3) The discharge causes the loss of greater than 300 linear feet of intermittent stream bed. In such case, to be authorized the District Engineer must determine that the activity complies with the other terms and conditions of the NWP, determine adverse environmental effects are minimal both individually and cumulatively, and waive the limitation on stream impacts in writing before the permittee may proceed;

d. For discharges in special aquatic sites, including wetlands, the notification must include a delineation of affected special aquatic sites;

e. The discharge is part of a single and complete project;

f. The permittee must avoid and minimize discharges into waters of the US at the project site to the maximum extent practicable. The notification, when required, must include a written statement explaining how avoidance and minimization of losses of waters of the US were achieved on the project site. Compensatory mitigation will normally be required to offset the losses of waters of the US. (See General Condition 19.) The notification must also include a compensatory mitigation proposal for offsetting unavoidable losses of waters of the US. If an applicant asserts that the adverse effects of the project are minimal without mitigation, then the applicant may submit justification explaining why compensatory mitigation should not be required for the District Engineer's consideration;

g. When this NWP is used in conjunction with any other NWP, any combined total permanent loss of waters of the US exceeding 1/10-acre requires that the permittee notify the District Engineer in accordance with General Condition 13;

h. Any work authorized by this NWP must not cause more than minimal degradation of water quality or more than minimal changes to the flow characteristics of any stream (see General Conditions 9 and 21);

i. For discharges causing the loss of 1/10-acre or less of waters of the US, the permittee must submit a report, within 30 days of completion of the work, to the District Engineer that contains the following information: (1) The name, address, and telephone number of the permittee; (2) The location of the work; (3) A description of the work; (4) The type and acreage of the loss of waters of the US (e.g., 1/12-acre of emergent wetlands); and (5) The type and acreage of any compensatory mitigation used to offset the loss of waters of the US (e.g., 1/12-acre of emergent wetlands created on-site);

j. If there are any open waters or streams within the project area, the permittee will establish and maintain, to the maximum extent practicable, wetland or upland vegetated buffers next to those open waters or streams consistent with General Condition 19. Deed restrictions, conservation easements, protective covenants, or other means of land conservation and preservation are required to protect and maintain the vegetated buffers established on the project site.

Only residential, commercial, and institutional activities with structures on the foundation(s) or building pad(s), as well as the attendant features, are authorized by this NWP. The compensatory mitigation proposal that is required in paragraph (f) of this NWP may be either conceptual or detailed. The wetland or upland vegetated buffer required in paragraph (j) of this NWP will be determined on a case-by-case basis by the District Engineer for addressing water quality concerns. The required wetland or upland vegetated buffer is part of the overall compensatory mitigation requirement for this NWP. If the project site was previously used for agricultural purposes and the farm owner/operator used NWP 40 to authorize activities in waters of the US to increase production or construct farm buildings, NWP 39 cannot be used by the developer to authorize additional activities. This is more than the acreage limit for NWP 39 impacts to waters of the US (i.e., the combined acreage loss authorized under NWPs 39 and 40 cannot exceed 1/2-acre, see General Condition 15).

Subdivisions: For residential subdivisions, the aggregate total loss of waters of US authorized by NWP 39 can not exceed 1/2-acre. This includes any loss of waters associated with development of individual subdivision lots. (Sections 10 and 404)

Note: Areas where wetland vegetation is not present should be determined by the presence or absence of an ordinary high water mark or bed and bank. Areas that are waters of the US based on this criterion would require a PCN although water is

infrequently present in the stream channel (except for ephemeral waters, which do not require PCNs).

**\*\*\* 40. Agricultural Activities.** Discharges of dredged or fill material into non-tidal waters of the US, excluding non-tidal wetlands adjacent to tidal waters, for improving agricultural production and the construction of building pads for farm buildings. Authorized activities include the installation, placement, or construction of drainage tiles, ditches, or levees; mechanized land clearing; land leveling; the relocation of existing serviceable drainage ditches constructed in waters of the US; and similar activities, provided the permittee complies with the following terms and conditions:

a. For discharges into non-tidal wetlands to improve agricultural production, the following criteria must be met if the permittee is an United States Department of Agriculture (USDA) Program participant:

(1) The permittee must obtain a categorical minimal effects exemption, minimal effect exemption, or mitigation exemption from NRCS in accordance with the provisions of the Food Security Act of 1985, as amended (16 U.S.C. 3801 et seq.);

(2) The discharge into non-tidal wetlands does not result in the loss of greater than 1/2-acre of non-tidal wetlands on a farm tract;

(3) The permittee must have NRCS-certified wetland delineation;

(4) The permittee must implement an NRCS-approved compensatory mitigation plan that fully offsets wetland losses, if required; and

(5) The permittee must submit a report, within 30 days of completion of the authorized work, to the District Engineer that contains the following information: (a) The name, address, and telephone number of the permittee; (b) The location of the work; (c) A description of the work; (d) The type and acreage (or square feet) of the loss of wetlands (e.g., 1/3-acre of emergent wetlands); and (e) The type, acreage (or square feet), and location of compensatory mitigation (e.g. 1/3-acre of emergent wetland on a farm tract; credits purchased from a mitigation bank); or

b. For discharges into non-tidal wetlands to improve agricultural production, the following criteria must be met if the permittee is not a USDA Program participant (or a USDA Program participant for which the proposed work does not qualify for authorization under paragraph (a) of this NWP):

(1) The discharge into non-tidal wetlands does not result in the loss of greater than 1/2-acre of non-tidal wetlands on a farm tract;

(2) The permittee must notify the District Engineer in accordance with General Condition 13, if the discharge results in the loss of greater than 1/10-acre of non-tidal wetlands;

(3) The notification must include a delineation of affected wetlands; and

(4) The notification must include a compensatory mitigation proposal to offset losses of waters of the US; or

c. For the construction of building pads for farm buildings, the discharge does not cause the loss of greater than 1/2-acre of non-tidal wetlands that were in agricultural production prior to December 23, 1985, (i.e., farmed wetlands) and the permittee must notify the District Engineer in accordance with General Condition 13; and

d. Any activity in other waters of the US is limited to the relocation of existing serviceable drainage ditches constructed in non-tidal streams. This NWP does not authorize the relocation of greater than 300 linear-feet of existing serviceable drainage ditches constructed in non-tidal streams unless, for drainage ditches constructed in intermittent non-tidal streams, the District Engineer waives this criterion in writing, and the District Engineer has determined that the project complies with all terms and conditions of this NWP, and that any adverse impacts of the project on the aquatic environment are minimal, both individually and cumulatively. For impacts exceeding 300-linear feet of impacts to existing serviceable ditches constructed in intermittent non-tidal streams, the permittee must notify the District Engineer in accordance with the "Notification" General Condition 13; and

e. The term "farm tract" refers to a parcel of land identified by the Farm Service Agency. The Corps will identify other waters of the US on the farm tract. NRCS will determine if a proposed agricultural activity meets the terms and conditions of paragraph a. of this NWP, except as provided below. For those activities that require notification, the District Engineer will determine if a proposed agricultural activity is authorized by paragraphs b., c., and/or d. of this NWP. USDA Program participants requesting authorization for discharges of dredged or fill material into waters of the US

authorized by paragraphs (c) or (d) of this NWP, in addition to paragraph (a), must notify the District Engineer in accordance with General Condition 13 and the District Engineer will determine if the entire single and complete project is authorized by this NWP. Discharges of dredged or fill material into waters of the US associated with completing required compensatory mitigation are authorized by this NWP. However, total impacts, including other authorized impacts under this NWP, may not exceed the 1/2-acre limit of this NWP. This NWP does not affect, or otherwise regulate, discharges associated with agricultural activities when the discharge qualifies for an exemption under section 404(f) of the CWA, even though a categorical minimal effects exemption, minimal effect exemption, or mitigation exemption from NRCS pursuant to the Food Security Act of 1985, as amended, may be required. Activities authorized by paragraphs a. through d. may not exceed a total of 1/2-acre on a single farm tract. If the site was used for agricultural purposes and the farm owner/operator used either paragraphs a., b., or c. of this NWP to authorize activities in waters of the US to increase agricultural production or construct farm buildings, and the current landowner wants to use NWP 39 to authorize residential, commercial, or industrial development activities in waters of the US on the site, the combined acreage loss authorized by NWPs 39 and 40 cannot exceed 1/2-acre (see General Condition 15). (Section 404)

**41. Reshaping Existing Drainage Ditches.** Discharges of dredged or fill material into non-tidal waters of the US, excluding non-tidal wetlands adjacent to tidal waters, to modify the cross-sectional configuration of currently serviceable drainage ditches constructed in waters of the US. The reshaping of the ditch cannot increase drainage capacity beyond the original design capacity. Nor can it expand the area drained by the ditch as originally designed (i.e., the capacity of the ditch must be the same as originally designed and it cannot drain additional wetlands or other waters of the US). Compensatory mitigation is not required because the work is designed to improve water quality (e.g., by regrading the drainage ditch with gentler slopes, which can reduce erosion, increase growth of vegetation, increase uptake of nutrients and other substances by vegetation, etc.).

Notification: The permittee must notify the District Engineer in accordance with General Condition 13 if greater than 500 linear feet of drainage ditch will be reshaped. Material resulting from excavation may not be permanently sidecast into waters but may be temporarily sidecast (up to three months) into waters of the US, provided the material is not placed in such a manner that it is dispersed by currents or other forces. The District Engineer may extend the period of temporary sidecasting not to exceed a total of 180 days, where appropriate. In general, this NWP does not apply to reshaping drainage ditches constructed in uplands, since these areas are generally not waters of the US, and thus no permit from the Corps is required, or to the maintenance of existing drainage ditches to their original dimensions and configuration, which does not require a Section 404 permit (see 33 CFR 323.4(a)(3)). This NWP does not authorize the relocation of drainage ditches constructed in waters of the US; the location of the centerline of the reshaped drainage ditch must be approximately the same as the location of the centerline of the original drainage ditch. This NWP does not authorize stream channelization or stream relocation projects. (Section 404)

NOTE: THE IEPA HAS CONDITIONED SECTION 401 WATER QUALITY CERTIFICATION APPLICABLE TO NATIONWIDE PERMIT 41. DEPARTMENT OF THE ARMY AUTHORIZATION PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT (33 U.S.C. 1344) UNDER NATIONWIDE PERMIT 41 WILL BE SUBJECT TO THE IEPA CONDITIONS IN ADDITION TO THE CONDITIONS PUBLISHED IN SECTION C.

Section 401 Water Quality Certification Conditions for Nationwide Permit 41, Reshaping Existing Drainage Ditches.

1. The applicant shall not cause:
  - A. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulation;
  - B. water pollution defined and prohibited by the Illinois Environmental Protection Act; or
  - C. interference with water use practices near public recreation areas or water supply intakes.

2. The applicant for Nationwide Permit shall provide adequate planning and supervision during the project construction period for implementing construction methods, processes and cleanup procedures necessary to prevent water pollution and control erosion.
3. Any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all state statues, regulations and permit requirements with no discharge to waters of the State unless a permit has been issued by the Illinois EPA. Any backfilling must be done with clean material and placed in a manner to prevent violation of applicable water quality standards.
4. All areas affected by construction shall be mulched and seeded as soon after construction as possible. The applicant shall undertake necessary measures and procedures to reduce erosion during construction. Interim measures to prevent erosion during construction shall be taken and may include the installation of staked straw bales, sedimentation basins and temporary mulching. All construction within the waterway shall be conducted during zero or low flow conditions. The applicant shall be responsible for obtaining an NPDES Storm Water Permit prior to initiating construction if the construction activity associated with the project will result in the disturbance of 5 (five) or more acres, total land area. An NPDES Storm Water Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form by certified mail to the Agency's Division of Water Pollution Control, Permit Section.
5. The applicant shall implement erosion control measures consistent with the "Illinois Urban Manual" (IEPA/USDA, NRCS; 1995).
6. The applicant is advised that the following permit(s) must be obtained from the Agency:  
the applicant must obtain permits to construct sanitary sewers, water mains and related facilities prior to construction.
7. The proposed work shall be constructed with adequate erosion control measures (i.e., silt fences, straw bales, etc.) to prevent transport of sediment and materials to the adjoining wetlands and/or streams.

**\*\*\* 42. Recreational Facilities.** Discharges of dredged or fill material into non-tidal waters of the US, excluding non-tidal wetlands adjacent to tidal waters, for the construction or expansion of recreational facilities, provided the activity meets all of the following criteria:

- a. The discharge does not cause the loss of greater than 1/2-acre of non-tidal waters of the US, excluding non-tidal wetlands adjacent to tidal waters;
- b. The discharge does not cause the loss of greater than 300 linear-feet of a stream bed, unless for intermittent stream beds this criterion is waived in writing pursuant to a determination by the District Engineer, as specified below, that the project complies with all terms and conditions of this NWP and that any adverse impacts of the project on the aquatic environment are minimal, both individually and cumulatively;
- c. The permittee notifies the District Engineer in accordance with the "Notification" General Condition 13 for discharges exceeding 300 linear feet of impact of intermittent stream beds. In such cases, to be authorized the District Engineer must determine that the activity complies with the other terms and conditions of the NWP, determine the adverse environmental effects are minimal both individually and cumulatively, and waive this limitation in writing before the permittee may proceed;
- d. For discharges causing the loss of greater than 1/10-acre of non-tidal waters of the US, the permittee notifies the District Engineer in accordance with General Condition 13;

- e. For discharges in special aquatic sites, including wetlands, the notification must include a delineation of affected special aquatic sites;
- f. The discharge is part of a single and complete project; and
- g. Compensatory mitigation will normally be required to offset the losses of waters of the US. The notification must also include a compensatory mitigation proposal to offset authorized losses of waters of the US.

For the purposes of this NWP, the term "recreational facility" is defined as a recreational activity that is integrated into the natural landscape and does not substantially change preconstruction grades or deviate from natural landscape contours. For the purpose of this permit, the primary function of recreational facilities does not include the use of motor vehicles, buildings, or impervious surfaces. Examples of recreational facilities that may be authorized by this NWP include hiking trails, bike paths, horse paths, nature centers, and campgrounds (excluding trailer parks). This NWP may authorize the construction or expansion of golf courses and the expansion of ski areas, provided the golf course or ski area does not substantially deviate from natural landscape contours. Additionally, these activities are designed to minimize adverse effects to waters of the US and riparian areas through the use of such practices as integrated pest management, adequate stormwater management facilities, vegetated buffers, reduced fertilizer use, etc. The facility must have adequate water quality management measures in accordance with General Condition 9, such as a stormwater management facility, to ensure that the recreational facility results in no substantial adverse effects to water quality. This NWP also authorizes the construction or expansion of small support facilities, such as maintenance and storage buildings and stables that are directly related to the recreational activity. This NWP does not authorize other buildings, such as hotels, restaurants, etc. The construction or expansion of playing fields (e.g., baseball, soccer, or football fields), basketball and tennis courts, racetracks, stadiums, arenas, and the construction of new ski areas are not authorized by this NWP. (Section 404)

**\*\*\* 43. Stormwater Management Facilities.** Discharges of dredged or fill material into non-tidal waters of the US, excluding non-tidal wetlands adjacent to tidal waters, for the construction and maintenance of stormwater management facilities, including activities for the excavation of stormwater ponds/facilities, detention basins, and retention basins; the installation and maintenance of water control structures, outfall structures and emergency spillways; and the maintenance dredging of existing stormwater management ponds/facilities and detention and retention basins, provided the activity meets all of the following criteria:

- a. The discharge for the construction of new stormwater management facilities does not cause the loss of greater than 1/2-acre of non-tidal waters of the US, excluding non-tidal wetlands adjacent to tidal waters;
- b. The discharge does not cause the loss of greater than 300 linear-feet of a stream bed, unless for intermittent stream beds this criterion is waived in writing pursuant to a determination by the District Engineer, as specified below, that the project complies with all terms and conditions of this NWP and that any adverse impacts of the project on the aquatic environment are minimal, both individually and cumulatively;
- c. For discharges causing the loss of greater than 300 linear feet of intermittent stream beds, the permittee notifies the District Engineer in accordance with the "Notification" General Condition 13. In such cases, to be authorized the District Engineer must determine that the activity complies with the other terms and conditions of the NWP, determine the adverse environmental effects are minimal both individually and cumulatively, and waive this limitation in writing before the permittee may proceed;
- d. The discharges of dredged or fill material for the construction of new stormwater management facilities in perennial streams is not authorized;
- e. For discharges or excavation for the construction of new stormwater management facilities or for the maintenance of existing stormwater management facilities causing the loss of greater than 1/10-acre of non-tidal waters, excluding non-tidal wetlands adjacent to tidal waters, provided the permittee notifies the District Engineer in accordance with the "Notification" General Condition 13. In addition, the notification must include:
  - (1) A maintenance plan. The maintenance plan should be in accordance with state and local requirements, if any such requirements exist;
  - (2) For discharges in special aquatic sites, including wetlands and submerged aquatic vegetation, the notification must include a delineation of affected areas; and



(3) A compensatory mitigation proposal that offsets the loss of waters of the US. Maintenance in constructed areas will not require mitigation provided such maintenance is accomplished in designated maintenance areas and not within compensatory mitigation areas (i.e., District Engineers may designate non-maintenance areas, normally at the downstream end of the stormwater management facility, in existing stormwater management facilities). (No mitigation will be required for activities that are exempt from Section 404 permit requirements);

f. The permittee must avoid and minimize discharges into waters of the US at the project site to the maximum extent practicable, and the notification must include a written statement to the District Engineer detailing compliance with this condition (i.e. why the discharge must occur in waters of the US and why additional minimization cannot be achieved);

g. The stormwater management facility must comply with General Condition 21 and be designed using BMPs and watershed protection techniques. Examples may include forebays (deeper areas at the upstream end of the stormwater management facility that would be maintained through excavation), vegetated buffers, and siting considerations to minimize adverse effects to aquatic resources. Another example of a BMP would be bioengineering methods incorporated into the facility design to benefit water quality and minimize adverse effects to aquatic resources from storm flows, especially downstream of the facility, that provide, to the maximum extent practicable, for long term aquatic resource protection and enhancement;

h. Maintenance excavation will be in accordance with an approved maintenance plan and will not exceed the original contours of the facility as approved and constructed; and

i. The discharge is part of a single and complete project. (Section 404)

**44. Mining Activities.** Discharges of dredged or fill material into:

(i) Isolated waters; streams where the annual average flow is 1 cubic foot per second or less, and non-tidal wetlands adjacent to headwater streams, for aggregate mining (i.e., sand, gravel, and crushed and broken stone) and associated support activities;

(ii) Lower perennial streams, excluding wetlands adjacent to lower perennial streams, for aggregate mining activities (support activities in lower perennial streams or adjacent wetlands are not authorized by this NWP); and/or

(iii) Isolated waters and non-tidal wetlands adjacent to headwater streams, for hard rock/mineral mining activities (i.e., extraction of metalliferous ores from subsurface locations) and associated support activities, provided the discharge meets the following criteria:

a. The mined area within waters of the US, plus the acreage loss of waters of the US resulting from support activities, cannot exceed 1/2-acre;

b. The permittee must avoid and minimize discharges into waters of the US at the project site to the maximum extent practicable, and the notification must include a written statement detailing compliance with this condition (i.e., why the discharge must occur in waters of the US and why additional minimization cannot be achieved);

c. In addition to General Conditions 17 and 20, activities authorized by this permit must not substantially alter the sediment characteristics of areas of concentrated shellfish beds or fish spawning areas. Normally, the water quality management measures required by General Condition 9 should address these impacts;

d. The permittee must implement necessary measures to prevent increases in stream gradient and water velocities and to prevent adverse effects (e.g., head cutting, bank erosion) to upstream and downstream channel conditions;

e. Activities authorized by this permit must not result in adverse effects on the course, capacity, or condition of navigable waters of the US;

f. The permittee must use measures to minimize downstream turbidity;

g. Wetland impacts must be compensated through mitigation approved by the Corps;

h. Beneficiation and mineral processing for hard rock/mineral mining activities may not occur within 200 feet of the ordinary high water mark of any open waterbody. Although the Corps does not regulate discharges from these activities, a CWA section 402 permit may be required;

i. All activities authorized must comply with General Conditions 9 and 21. Further, the District Engineer may require water quality management measures to ensure the authorized work results in minimal adverse effects to water quality;

j. Except for aggregate mining activities in lower perennial streams, no aggregate mining can occur within stream beds where the average annual flow is greater than 1 cubic foot per second or in waters of the US within 100 feet of the ordinary high water mark of

headwater stream segments where the average annual flow of the stream is greater than 1 cubic foot per second (aggregate mining can occur in areas immediately adjacent to the ordinary high water mark of a stream where the average annual flow is 1 cubic foot per second or less);

k. Single and complete project: The discharge must be for a single and complete project, including support activities. Discharges of dredged or fill material into waters of the US for multiple mining activities on several designated parcels of a single and complete mining operation can be authorized by this NWP provided the 1/2-acre limit is not exceeded; and

l. Notification: The permittee must notify the District Engineer in accordance with General Condition 13. The notification must include: (1) A description of waters of the US adversely affected by the project; (2) A written statement to the District Engineer detailing compliance with paragraph (b), above (i.e., why the discharge must occur in waters of the US and why additional minimization cannot be achieved); (3) A description of measures taken to ensure that the proposed work complies with paragraphs (c) through (f), above; and (4) A reclamation plan (for aggregate mining in isolated waters and non-tidal wetlands adjacent to headwaters and hard rock/mineral mining only).

This NWP does not authorize hard rock/mineral mining, including placer mining, in streams. No hard rock/mineral mining can occur in waters of the US within 100 feet of the ordinary high water mark of headwater streams. The term's "headwaters" and "isolated waters" are defined at 33 CFR 330.2(d) and (e), respectively. For the purposes of this NWP, the term "lower perennial stream" is defined as follows: "A stream in which the gradient is low and water velocity is slow, there is no tidal influence, some water flows throughout the year, and the substrate consists mainly of sand and mud." (Sections 10 and 404)

NOTE: THE IEPA HAS CONDITIONED SECTION 401 WATER QUALITY CERTIFICATION APPLICABLE TO NATIONWIDE PERMIT 44. DEPARTMENT OF THE ARMY AUTHORIZATION PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT (33 U.S.C. 1344) UNDER NATIONWIDE PERMIT 44 WILL BE SUBJECT TO THE IEPA CONDITIONS IN ADDITION TO THE CONDITIONS PUBLISHED IN SECTION C.

Section 401 Water Quality Certification Conditions for Nationwide Permit 44, Mining Activities.

1. The applicant shall not cause:

- A. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulation;
- B. water pollution defined and prohibited by the Illinois Environmental Protection Act; or
- C. interference with water use practices near public recreation areas or water supply intakes.

2. The applicant for Nationwide Permit shall provide adequate planning and supervision during the project construction period for implementing construction methods, processes and cleanup procedures necessary to prevent water pollution and control erosion.

3. Any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all state statues, regulations and permit requirements with no discharge to waters of the State unless a permit has been issued by the Illinois EPA. Any backfilling must be done with clean material and placed in a manner to prevent violation of applicable water quality standards.

4. All areas affected by construction shall be mulched and seeded as soon after construction as possible. The applicant shall undertake necessary measures and procedures to reduce erosion during construction. Interim measures to prevent erosion during construction shall be taken and may include the installation of staked straw bales, sedimentation basins and temporary mulching. All construction within the waterway shall be conducted

during zero or low flow conditions. The applicant shall be responsible for obtaining an NPDES Storm Water Permit prior to initiating construction if the construction activity associated with the project will result in the disturbance of 5 (five) or more acres, total land area. An NPDES Storm Water Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form by certified mail to the Agency's Division of Water Pollution Control, Permit Section.

5. The applicant shall implement erosion control measures consistent with the "Illinois Urban Manual" (IEPA/USDA, NRCS; 1995).

6. Any applicant that is proposing mining activities shall obtain a construction and/or operation permit or exemption thereof pursuant to 35 Il. Adm. Code, Subtitle D, Sections 403, 404.101 and 404.103.

#### C. Nationwide Permit General Conditions

The following General Conditions must be followed in order for any authorization by an NWP to be valid:

**1. Navigation.** No activity may cause more than a minimal adverse effect on navigation.

**2. Proper Maintenance.** Any structure or fill authorized shall be properly maintained, including maintenance to ensure public safety.

**3. Soil Erosion and Sediment Controls.** Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.

**4. Aquatic Life Movements.** No activity may substantially disrupt the necessary life-cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. Culverts placed in streams must be installed to maintain low flow conditions.

**5. Equipment.** Heavy equipment working in wetlands must be placed on mats, or other measures must be taken to minimize soil disturbance.

**6. Regional and Case-By-Case Conditions.** The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state or tribe in its Section 401 Water Quality Certification and Coastal Zone Management Act consistency determination.

**7. Wild and Scenic Rivers.** No activity may occur in a component of the National Wild and Scenic River System; or in a river officially designated by Congress as a "study river" for possible inclusion in the system, while the river is in an official study status; unless the appropriate Federal agency, with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation, or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency in the area (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).

**8. Tribal Rights.** No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

**9. Water Quality.** (a) In certain states and tribal lands an individual 401 Water Quality Certification must be obtained or waived (See 33 CFR 330.4(c)).

(b) For NWPs 12, 14, 17, 18, 32, 39, 40, 42, 43, and 44, where the state or tribal 401 certification (either generically or individually) does not require or approve water quality management measures, the permittee must provide water quality management measures that will ensure that the authorized work does not result in more than minimal degradation of water quality (or the Corps determines that compliance with state or local standards, where applicable, will ensure no more than minimal adverse effect on water quality). An important component of water quality management includes stormwater management that minimizes degradation of the downstream aquatic system, including water quality (refer to General Condition 21 for stormwater management requirements). Another important component of water quality management is the establishment and maintenance of vegetated buffers next to open waters, including streams (refer to General Condition 19 for vegetated buffer requirements for the NWPs).

This condition is only applicable to projects that have the potential to affect water quality. While appropriate measures must be taken, in most cases it is not necessary to conduct detailed studies to identify such measures or to require monitoring.

**10. Coastal Zone Management.** In certain states, an individual state coastal zone management consistency concurrence must be obtained or waived (see 33 CFR 330.4(d)).

**11. Endangered Species.** (a) No activity is authorized under any NWP which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will destroy or adversely modify the critical habitat of such species. Non-federal permittees shall notify the District Engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or is located in the designated critical habitat and shall not begin work on the activity until notified by the District Engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that may affect Federally-listed endangered or threatened species or designated critical habitat, the notification must include the name(s) of the endangered or threatened species that may be affected by the proposed work or that utilize the designated critical habitat that may be affected by the proposed work. As a result of formal or informal consultation with the FWS or NMFS the District Engineer may add species-specific regional endangered species conditions to the NWPs.

(b) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the USFWS or the NMFS, both lethal and non-lethal "takes" of protected species are in violation of the ESA. Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the USFWS and NMFS or their world wide web pages at <http://www.fws.gov/r9endspp/endspp.html> and [http://www.nfms.noaa.gov/prot\\_res/overview/es.html](http://www.nfms.noaa.gov/prot_res/overview/es.html) respectively.

**12. Historic Properties.** No activity which may affect historic properties listed, or eligible for listing, in the National Register of Historic Places is authorized, until the District Engineer has complied with the provisions of 33 CFR part 325, Appendix C. The prospective permittee must notify the District Engineer if the authorized activity may affect any historic properties listed, determined to be eligible, or which the prospective permittee has reason to believe may be eligible for listing on the National Register of Historic Places, and shall not begin the activity until notified by the District Engineer that the requirements of the National Historic Preservation Act have been satisfied and that the activity is authorized. Information on the location and existence of historic resources can be obtained from the State Historic Preservation Office and the National Register of Historic Places (see 33 CFR 330.4(g)). For activities that may affect historic properties listed in, or eligible for listing in, the National Register of Historic Places, the notification must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property.

**13. Notification.**

(a) Timing; where required by the terms of the NWP, the prospective permittee must notify the District Engineer with a preconstruction notification (PCN) as early as possible. The District Engineer must determine if the notification is complete within 30 days of the date of receipt and can request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the District Engineer will notify the prospective permittee that the notification is still incomplete and the PCN review process will not commence until all of the requested information has been received by the District Engineer. The prospective permittee shall not begin the activity:

(1) Until notified in writing by the District Engineer that the activity may proceed under the NWP with any special conditions imposed by the District or Division Engineer; or

(2) If notified in writing by the District or Division Engineer that an Individual Permit is required; or

(3) Unless 45 days have passed from the District Engineer's receipt of the complete notification and the prospective permittee has not received written notice from the District or Division Engineer. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) Contents of Notification: The notification must be in writing and include the following information:

(1) Name, address and telephone numbers of the prospective permittee;

(2) Location of the proposed project;

(3) Brief description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause; any other NWP(s), Regional General Permit(s), or Individual Permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP (Sketches usually clarify the project and when provided result in a quicker decision.);

(4) For NWPs 7, 12, 14, 18, 21, 34, 38, 39, 40, 41, 42, and 43, the PCN must also include a delineation of affected special aquatic sites, including wetlands, vegetated shallows (e.g., submerged aquatic vegetation, seagrass beds), and riffle and pool complexes (see paragraph 13(f));

(5) For NWP 7 (Outfall Structures and Maintenance), the PCN must include information regarding the original design capacities and configurations of those areas of the facility where maintenance dredging or excavation is proposed;

(6) For NWP 14 (Linear Transportation Projects), the PCN must include a compensatory mitigation proposal to offset permanent losses of waters of the US and a statement describing how temporary losses of waters of the US will be minimized to the maximum extent practicable;

(7) For NWP 21 (Surface Coal Mining Activities), the PCN must include an Office of Surface Mining (OSM) or state-approved mitigation plan, if applicable. To be authorized by this NWP, the District Engineer must determine that the activity complies with the terms and conditions of the NWP and that the adverse environmental effects are minimal both individually and cumulatively and must notify the project sponsor of this determination in writing;

(8) For NWP 27 (Stream and Wetland Restoration Activities), the PCN must include documentation of the prior condition of the site that will be reverted by the permittee;

(9) For NWP 29 (Single-Family Housing), the PCN must also include:

(i) Any past use of this NWP by the Individual Permittee and/or the permittee's spouse;

(ii) A statement that the single-family housing activity is for a personal residence of the permittee;

(iii) A description of the entire parcel, including its size, and a delineation of wetlands. For the purpose of this NWP, parcels of land measuring 1/4-acre or less will not require a formal on-site delineation. However, the applicant shall provide an indication of where the wetlands are and the amount of wetlands that exists on the property. For parcels greater than 1/4-acre in size, formal wetland delineation must be prepared in accordance with the current method required by the Corps. (See paragraph 13(f));

(iv) A written description of all land (including, if available, legal descriptions) owned by the prospective permittee and/or the prospective permittee's spouse, within a one mile radius of the parcel, in any form of ownership (including any land owned as a

partner, corporation, joint tenant, co-tenant, or as a tenant-by-the-entirety) and any land on which a purchase and sale agreement or other contract for sale or purchase has been executed;

(10) For NWP 31 (Maintenance of Existing Flood Control Facilities), the prospective permittee must either notify the District Engineer with a PCN prior to each maintenance activity or submit a five year (or less) maintenance plan. In addition, the PCN must include all of the following:

(i) Sufficient baseline information identifying the approved channel depths and configurations and existing facilities. Minor deviations are authorized, provided the approved flood control protection or drainage is not increased;

(ii) A delineation of any affected special aquatic sites, including wetlands; and,

(iii) Location of the dredged material disposal site;

(11) For NWP 33 (Temporary Construction, Access, and Dewatering), the PCN must also include a restoration plan of reasonable measures to avoid and minimize adverse effects to aquatic resources;

(12) For NWPs 39, 43 and 44, the PCN must also include a written statement to the District Engineer explaining how avoidance and minimization for losses of waters of the US were achieved on the project site;

(13) For NWP 39 and NWP 42, the PCN must include a compensatory mitigation proposal to offset losses of waters of the US or justification explaining why compensatory mitigation should not be required. For discharges that cause the loss of greater than 300 linear feet of an intermittent stream bed, to be authorized, the District Engineer must determine that the activity complies with the other terms and conditions of the NWP, determine adverse environmental effects are minimal both individually and cumulatively, and waive the limitation on stream impacts in writing before the permittee may proceed;

(14) For NWP 40 (Agricultural Activities), the PCN must include a compensatory mitigation proposal to offset losses of waters of the US. This NWP does not authorize the relocation of greater than 300 linear-feet of existing serviceable drainage ditches constructed in non-tidal streams unless, for drainage ditches constructed in intermittent non-tidal streams, the District Engineer waives this criterion in writing, and the District Engineer has determined that the project complies with all terms and conditions of this NWP, and that any adverse impacts of the project on the aquatic environment are minimal, both individually and cumulatively;

(15) For NWP 43 (Stormwater Management Facilities), the PCN must include, for the construction of new stormwater management facilities, a maintenance plan (in accordance with state and local requirements, if applicable) and a compensatory mitigation proposal to offset losses of waters of the US. For discharges that cause the loss of greater than 300 linear feet of an intermittent stream bed, to be authorized, the District Engineer must determine that the activity complies with the other terms and conditions of the NWP, determine adverse environmental effects are minimal both individually and cumulatively, and waive the limitation on stream impacts in writing before the permittee may proceed;

(16) For NWP 44 (Mining Activities), the PCN must include a description of all waters of the US adversely affected by the project, a description of measures taken to minimize adverse effects to waters of the US, a description of measures taken to comply with the criteria of the NWP, and a reclamation plan (for all aggregate mining activities in isolated waters and non-tidal wetlands adjacent to headwaters and any hard rock/mineral mining activities);

(17) For activities that may adversely affect Federally-listed endangered or threatened species, the PCN must include the name(s) of those endangered or threatened species that may be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work; and

(18) For activities that may affect historic properties listed in, or eligible for listing in, the National Register of Historic Places, the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property.

(c) Form of Notification: The standard Individual Permit application form (Form ENG 4345) may be used as the notification but must clearly indicate that it is a PCN and must include all of the information required in (b) (1)-(18) of General Condition 13. A letter containing the requisite information may also be used.

(d) District Engineer's Decision: In reviewing the PCN for the proposed activity, the District Engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. The prospective permittee may submit a proposed

mitigation plan with the PCN to expedite the process. The District Engineer will consider any proposed compensatory mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects to the aquatic environment of the proposed work are minimal. If the District Engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects on the aquatic environment are minimal, after considering mitigation, the District Engineer will notify the permittee and include any conditions the District Engineer deems necessary. The District Engineer must approve any compensatory mitigation proposal before the permittee commences work. If the prospective permittee is required to submit a compensatory mitigation proposal with the PCN, the proposal may be either conceptual or detailed. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the District Engineer will expeditiously review the proposed compensatory mitigation plan. The District Engineer must review the plan within 45 days of receiving a complete PCN and determine whether the conceptual or specific proposed mitigation would ensure no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the aquatic environment (after consideration of the compensatory mitigation proposal) are determined by the District Engineer to be minimal, the District Engineer will provide a timely written response to the applicant. The response will state that the project can proceed under the terms and conditions of the NWP.

If the District Engineer determines that the adverse effects of the proposed work are more than minimal, then the District Engineer will notify the applicant either: (1) That the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an Individual Permit; (2) that the project is authorized under the NWP subject to the applicant's submission of a mitigation proposal that would reduce the adverse effects on the aquatic environment to the minimal level; or (3) that the project is authorized under the NWP with specific modifications or conditions. Where the District Engineer determines that mitigation is required to ensure no more than minimal adverse effects occur to the aquatic environment, the activity will be authorized within the 45-day PCN period. The authorization will include the necessary conceptual or specific mitigation or a requirement that the applicant submit a mitigation proposal that would reduce the adverse effects on the aquatic environment to the minimal level. When conceptual mitigation is included, or a mitigation plan is required under item (2) above, no work in waters of the US will occur until the District Engineer has approved a specific mitigation plan.

(e) Agency Coordination: The District Engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects to a minimal level.

For activities requiring notification to the District Engineer that result in the loss of greater than 1/2-acre of waters of the US, the District Engineer will provide immediately (e.g., via facsimile transmission, overnight mail, or other expeditious manner) a copy to the appropriate Federal or state offices (USFWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO), and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will then have 10 calendar days from the date the material is transmitted to telephone or fax the District Engineer notice that they intend to provide substantive, site-specific comments. If so contacted by an agency, the District Engineer will wait an additional 15 calendar days before making a decision on the notification. The District Engineer will fully consider agency comments received within the specified time frame, but will provide no response to the resource agency, except as provided below. The District Engineer will indicate in the administrative record associated with each notification that the resource agencies' concerns were considered. As required by section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act, the District Engineer will provide a response to NMFS within 30 days of receipt of any Essential Fish Habitat conservation recommendations. Applicants are encouraged to provide the Corps multiple copies of notifications to expedite agency notification.

(f) Wetland Delineations: Wetland delineations must be prepared in accordance with the current method required by the Corps (For NWP 29 see paragraph (b)(9)(iii) for parcels less than (1/4-acre in size). The permittee may ask the Corps to delineate the special aquatic site. There may be some delay if the Corps does the delineation.

Furthermore, the 45-day period will not start until the wetland delineation has been completed and submitted to the Corps, where appropriate.

**14. Compliance Certification.** Every permittee who has received NWP verification from the Corps will submit a signed certification regarding the completed work and any required mitigation. The certification will be forwarded by the Corps with the authorization letter and will include:

(a) A statement that the authorized work was done in accordance with the Corps authorization, including any general or specific conditions;

(b) A statement that any required mitigation was completed in accordance with the permit conditions; and

(c) The signature of the permittee certifying the completion of the work and mitigation.

**15. Use of Multiple Nationwide Permits.** The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the US authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit (e.g. if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the US for the total project cannot exceed 1/3-acre).

**16. Water Supply Intakes.** No activity, including structures and work in navigable waters of the US or discharges of dredged or fill material, may occur in the proximity of a public water supply intake except where the activity is for repair of the public water supply intake structures or adjacent bank stabilization.

**17. Shellfish Beds.** No activity, including structures and work in navigable waters of the US or discharges of dredged or fill material, may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWP 4.

**18. Suitable Material.** No activity, including structures and work in navigable waters of the US or discharges of dredged or fill material, may consist of unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.) and material used for construction or discharged must be free from toxic pollutants in toxic amounts (see section 307 of the CWA).

**19. Mitigation.** The District Engineer will consider the factors discussed below when determining the acceptability of appropriate and practicable mitigation necessary to offset adverse effects on the aquatic environment that are more than minimal.

(a) The project must be designed and constructed to avoid and minimize adverse effects to waters of the US to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing or compensating) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland impacts requiring a PCN, unless the District Engineer determines in writing that some other form of mitigation would be more environmentally appropriate and provides a project-specific waiver of this requirement. Consistent with National policy, the District Engineer will establish a preference for restoration of wetlands as compensatory mitigation, with preservation used only in exceptional circumstances.

(d) Compensatory mitigation (i.e., replacement or substitution of aquatic resources for those impacted) will not be used to increase the acreage losses allowed by the acreage limits of some of the NWPs. For example, 1/4-acre of wetlands cannot be created to change a 3/4-acre loss of wetlands to a 1/2-acre loss associated with NWP 39 verification. However, 1/2-acre of created wetlands can be used to reduce the impacts of a 1/2-acre loss of wetlands to the minimum impact level in order to meet the minimal impact requirement associated with NWPs.

(e) To be practicable, the mitigation must be available and capable of being done considering costs, existing technology, and logistics in light of the overall project purposes. Examples of mitigation that may be appropriate and practicable include, but



are not limited to: reducing the size of the project; establishing and maintaining wetland or upland vegetated buffers to protect open waters such as streams; and replacing losses of aquatic resource functions and values by creating, restoring, enhancing, or preserving similar functions and values, preferably in the same watershed.

(f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the establishment, maintenance, and legal protection (e.g., easements, deed restrictions) of vegetated buffers to open waters. In many cases, vegetated buffers will be the only compensatory mitigation required. Vegetated buffers should consist of native species. The width of the vegetated buffers required will address documented water quality or aquatic habitat loss concerns. Normally, the vegetated buffer will be 25 to 50 feet wide on each side of the stream, but the District Engineers may require slightly wider vegetated buffers to address documented water quality or habitat loss concerns. Where both wetlands and open waters exist on the project site, the Corps will determine the appropriate compensatory mitigation (e.g., stream buffers or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where vegetated buffers are determined to be the most appropriate form of compensatory mitigation, the District Engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland impacts.

(g) Compensatory mitigation proposals submitted with the "notification" may be either conceptual or detailed. If conceptual plans are approved under the verification, then the Corps will condition the verification to require detailed plans be submitted and approved by the Corps prior to construction of the authorized activity in waters of the US.

(h) Permittees may propose the use of mitigation banks, in-lieu fee arrangements or separate activity-specific compensatory mitigation. In all cases that require compensatory mitigation, the mitigation provisions will specify the party responsible for accomplishing and/or complying with the mitigation plan.

**20. Spawning Areas.** Activities, including structures and work in navigable waters of the US or discharges of dredged or fill material, in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., excavate, fill, or smother downstream by substantial turbidity) of an important spawning area are not authorized.

**21. Management of Water Flows.** To the maximum extent practicable, the activity must be designed to maintain preconstruction downstream flow conditions (e.g., location, capacity, and flow rates). Furthermore, the activity must not permanently restrict or impede the passage of normal or expected high flows (unless the primary purpose of the fill is to impound waters) and the structure or discharge of dredged or fill material must withstand expected high flows. The activity must, to the maximum extent practicable, provide for retaining excess flows from the site, provide for maintaining surface flow rates from the site similar to preconstruction conditions, and provide for not increasing water flows from the project site, relocating water, or redirecting water flow beyond preconstruction conditions. Stream channelizing will be reduced to the minimal amount necessary, and the activity must, to the maximum extent practicable, reduce adverse effects such as flooding or erosion downstream and upstream of the project site, unless the activity is part of a larger system designed to manage water flows. In most cases, it will not be a requirement to conduct detailed studies and monitoring of water flow.

This condition is only applicable to projects that have the potential to affect waterflows. While appropriate measures must be taken, it is not necessary to conduct detailed studies to identify such measures or require monitoring to ensure their effectiveness. Normally, the Corps will defer to state and local authorities regarding management of water flow.

**22. Adverse Effects From Impoundments.** If the activity creates an impoundment of water, adverse effects to the aquatic system due to the acceleration of the passage of water, and/or the restricting its flow shall be minimized to the maximum extent practicable. This includes structures and work in navigable waters of the US, or discharges of dredged or fill material.

**23. Waterfowl Breeding Areas.** Activities, including structures and work in navigable waters of the US or discharges of dredged or fill material, into breeding areas for migratory waterfowl must be avoided to the maximum extent practicable.

**24. Removal of Temporary Fills.** Any temporary fills must be removed in their entirety and the affected areas returned to their preexisting elevation.

**25. Designated Critical Resource Waters.** Critical resource waters include, NOAA-designated marine sanctuaries, National Estuarine Research Reserves, National Wild and Scenic Rivers, critical habitat for Federally listed threatened and endangered species, coral reefs, state natural heritage sites, and outstanding national resource waters or other waters officially designated by a state as having particular environmental or ecological significance and identified by the District Engineer after notice and opportunity for public comment. The District Engineer may also designate additional critical resource waters after notice and opportunity for comment.

(a) Except as noted below, discharges of dredged or fill material into waters of the US are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, and 44 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters. Discharges of dredged or fill materials into waters of the US may be authorized by the above NWPs in National Wild and Scenic Rivers if the activity complies with General Condition 7. Further, such discharges may be authorized in designated critical habitat for Federally listed threatened or endangered species if the activity complies with General Condition 11 and the USFWS or the NMFS has concurred in a determination of compliance with this condition.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with General Condition 13, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The District Engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.

**26. Fills Within 100-Year Floodplains.** For purposes of this General Condition, 100-year floodplains will be identified through the existing Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps or FEMA-approved local floodplain maps.

(a) Discharges in Floodplain; Below Headwaters. Discharges of dredged or fill material into waters of the US within the mapped 100-year floodplain, below headwaters (i.e. five cfs), resulting in permanent above-grade fills, are not authorized by NWPs 39, 40, 42, 43, and 44.

(b) Discharges in Floodway; Above Headwaters. Discharges of dredged or fill material into waters of the US within the FEMA or locally mapped floodway, resulting in permanent above-grade fills, are not authorized by NWPs 39, 40, 42, and 44.

(c) The permittee must comply with any applicable FEMA-approved state or local floodplain management requirements.

**27. Construction Period.** For activities that have not been verified by the Corps and the project was commenced or under contract to commence by the expiration date of the NWP (or modification or revocation date), the work must be completed within 12-months after such date (including any modification that affects the project).

For activities that have been verified and the project was commenced or under contract to commence within the verification period, the work must be completed by the date determined by the Corps.

For projects that have been verified by the Corps, an extension of a Corps approved completion date maybe requested. This request must be submitted at least one month before the previously approved completion date.

#### D. Further Information

1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.

2. NWPs do not obviate the need to obtain other Federal, state, or local permits, approvals, or authorizations required by law.

3. NWPs do not grant any property rights or exclusive privileges.

4. NWPs do not authorize any injury to the property or rights of others.

5. NWPs do not authorize interference with any existing or proposed Federal project.

#### E. Definitions

**Best Management Practices (BMPs):** BMPs are policies, practices, procedures, or structures implemented to mitigate the adverse environmental effects on surface water quality resulting from development. BMPs are categorized as structural or non-structural. A BMP policy may affect the limits on a development.

**Compensatory Mitigation:** For purposes of Section 10/404, compensatory mitigation is the restoration, creation, enhancement, or in exceptional circumstances, preservation of wetlands and/or other aquatic resources for the purpose of compensating for unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved.

**Creation:** The establishment of a wetland or other aquatic resource where one did not formerly exist.

**Enhancement:** Activities conducted in existing wetlands or other aquatic resources that increase one or more aquatic functions.

**Ephemeral Stream:** An ephemeral stream has flowing water only during and for a short duration after, precipitation events in a typical year. Ephemeral stream beds are located above the water table year-round. Groundwater is not a source of water for the stream. Runoff from rainfall is the primary source of water for stream flow.

**Farm Tract:** A unit of contiguous land under one ownership that is operated as a farm or part of a farm.

**Flood Fringe:** That portion of the 100-year floodplain outside of the floodway (often referred to as "floodway fringe").

**Floodway:** The area regulated by Federal, state, or local requirements to provide for the discharge of the base flood so the cumulative increase in water surface elevation is no more than a designated amount (not to exceed one foot as set by the National Flood Insurance Program) within the 100-year floodplain.

**Independent Utility:** A test to determine what constitutes a single and complete project in the Corps regulatory program. A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases were not built can be considered as separate single and complete projects with independent utility.

**Intermittent Stream:** An intermittent stream has flowing water during certain times of the year, when groundwater provides water for stream flow. During dry periods, intermittent streams may not have flowing water. Runoff from rainfall is a supplemental source of water for stream flow.

**Loss of Waters of the US:** Waters of the US that include the filled area and other waters that are permanently adversely affected by flooding, excavation, or drainage because of the regulated activity. Permanent adverse effects include permanent above-grade, at-grade, or below-grade fills that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody. The acreage of loss of waters of the US is the threshold measurement of the impact to existing waters for determining whether a project may qualify for an NWP; it is not a net threshold that is calculated after considering compensatory mitigation that may be used to offset losses of aquatic functions and values. The loss of stream bed includes the linear feet of stream bed that is filled or excavated. Impacts to ephemeral streams are not included in

the linear foot measurement of loss of stream bed for the purpose of determining compliance with the linear foot limits of NWPs 39, 40, 42, and 43. Waters of the US temporarily filled, flooded, excavated, or drained, but restored to preconstruction contours and elevations after construction, are not included in the measurement of loss of waters of the US.

**Non-tidal Wetland:** A non-tidal wetland is a wetland (i.e., a water of the US) that is not subject to the ebb and flow of tidal waters. The definition of a wetland can be found at 33 CFR 328.3(b). Non-tidal wetlands contiguous to tidal waters are located landward of the high tide line (i.e., spring high tide line).

**Open Water:** An area that, during a year with normal patterns of precipitation, has standing or flowing water for sufficient duration to establish an ordinary high water mark. Aquatic vegetation within the area of standing or flowing water is either non-emergent, sparse, or absent. Vegetated shallows are considered to be open waters. The term "open water" includes rivers, streams, lakes, and ponds. For the purposes of the NWPs, this term does not include ephemeral waters.

**Perennial Stream:** A perennial stream has flowing water year-round during a typical year. The water table is located above the stream bed for most of the year. Groundwater is the primary source of water for stream flow. Runoff from rainfall is a supplemental source of water for stream flow.

**Permanent Above-grade Fill:** A discharge of dredged or fill material into waters of the US, including wetlands, that results in a substantial increase in ground elevation and permanently converts part or all of the waterbody to dry land. Structural fills authorized by NWPs 3, 25, 36, etc. are not included.

**Preservation:** The protection of ecologically important wetlands or other aquatic resources in perpetuity through the implementation of appropriate legal and physical mechanisms. Preservation may include protection of upland areas adjacent to wetlands as necessary to ensure protection and/or enhancement of the overall aquatic ecosystem.

**Restoration:** Re-establishment of wetland and/or other aquatic resource characteristics and function(s) at a site where they have ceased to exist, or exist in a substantially degraded state.

**Riffle and Pool Complex:** Riffle and pool complexes are special aquatic sites under the 404(b)(1) Guidelines. Riffle and pool complexes sometimes characterize steep gradient sections of streams. Such stream sections are recognizable by their hydraulic characteristics. The rapid movement of water over a coarse substrate in riffles results in a rough flow, a turbulent surface, and high dissolved oxygen levels in the water. Pools are deeper areas associated with riffles. A slower stream velocity, a streaming flow, a smooth surface, and a finer substrate characterize pools.

**Single and Complete Project:** The term "single and complete project" is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers (see definition of independent utility). For linear projects, the "single and complete project" (i.e., a single and complete crossing) will apply to each crossing of a separate water of the US (i.e., a single waterbody) at that location. An exception is for linear projects crossing a single waterbody several times at separate and distant locations: each crossing is considered a single and complete project. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or lake, etc., are not separate waterbodies.

**Stormwater Management:** Stormwater management is the mechanism for controlling stormwater runoff for the purposes of reducing downstream erosion, water quality degradation, and flooding and mitigating the adverse effects of changes in land use on the aquatic environment.

**Stormwater Management Facilities:** Stormwater management facilities are those facilities, including but not limited to, stormwater retention and detention ponds and BMPs, which retain water for a period of time to control runoff and/or improve the quality (i.e., by reducing the concentration of nutrients, sediments, hazardous substances and other pollutants) of stormwater runoff.

**Stream Bed:** The substrate of the stream channel between the ordinary high water marks. The substrate may be bedrock or inorganic particles that range in size from clay to boulders. Wetlands contiguous to the stream bed, but outside of the ordinary high water marks, are not considered part of the stream bed.

**Stream Channelization:** The manipulation of a stream channel to increase the rate of water flow through the stream channel. Manipulation may include deepening, widening, straightening, armoring, or other activities that change the stream cross-section or other aspects of stream channel geometry to increase the rate of water flow through the stream channel. A channelized stream remains a water of the US, despite the modifications to increase the rate of water flow.

**Tidal Wetland:** A tidal wetland is a wetland (i.e., water of the US) that is inundated by tidal waters. The definitions of a wetland and tidal waters can be found at 33 CFR 328.3(b) and 33 CFR 328.3(f), respectively. Tidal waters rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by other waters, wind, or other effects. Tidal wetlands are located channelward of the high tide line (i.e., spring high tide line) and are inundated by tidal waters two times per lunar month, during spring high tides.

**Vegetated Buffer:** A vegetated upland or wetland area next to rivers, streams, lakes, or other open waters which separates the open water from developed areas, including agricultural land. Vegetated buffers provide a variety of aquatic habitat functions and values (e.g., aquatic habitat for fish and other aquatic organisms, moderation of water temperature changes, and detritus for aquatic food webs) and help improve or maintain local water quality. A vegetated buffer can be established by maintaining an existing vegetated area or planting native trees, shrubs, and herbaceous plants on land next to open-waters. Mowed lawns are not considered vegetated buffers because they provide little or no aquatic habitat functions and values. The establishment and maintenance of vegetated buffers is a method of compensatory mitigation that can be used in conjunction with the restoration, creation, enhancement, or preservation of aquatic habitats to ensure that activities authorized by NWP's result in minimal adverse effects to the aquatic environment. (See General Condition 19.)

**Vegetated Shallows:** Vegetated shallows are special aquatic sites under the 404(b)(1) Guidelines. They are areas that are permanently inundated and under normal circumstances have rooted aquatic vegetation, such as seagrasses in marine and estuarine systems and a variety of vascular rooted plants in freshwater systems.

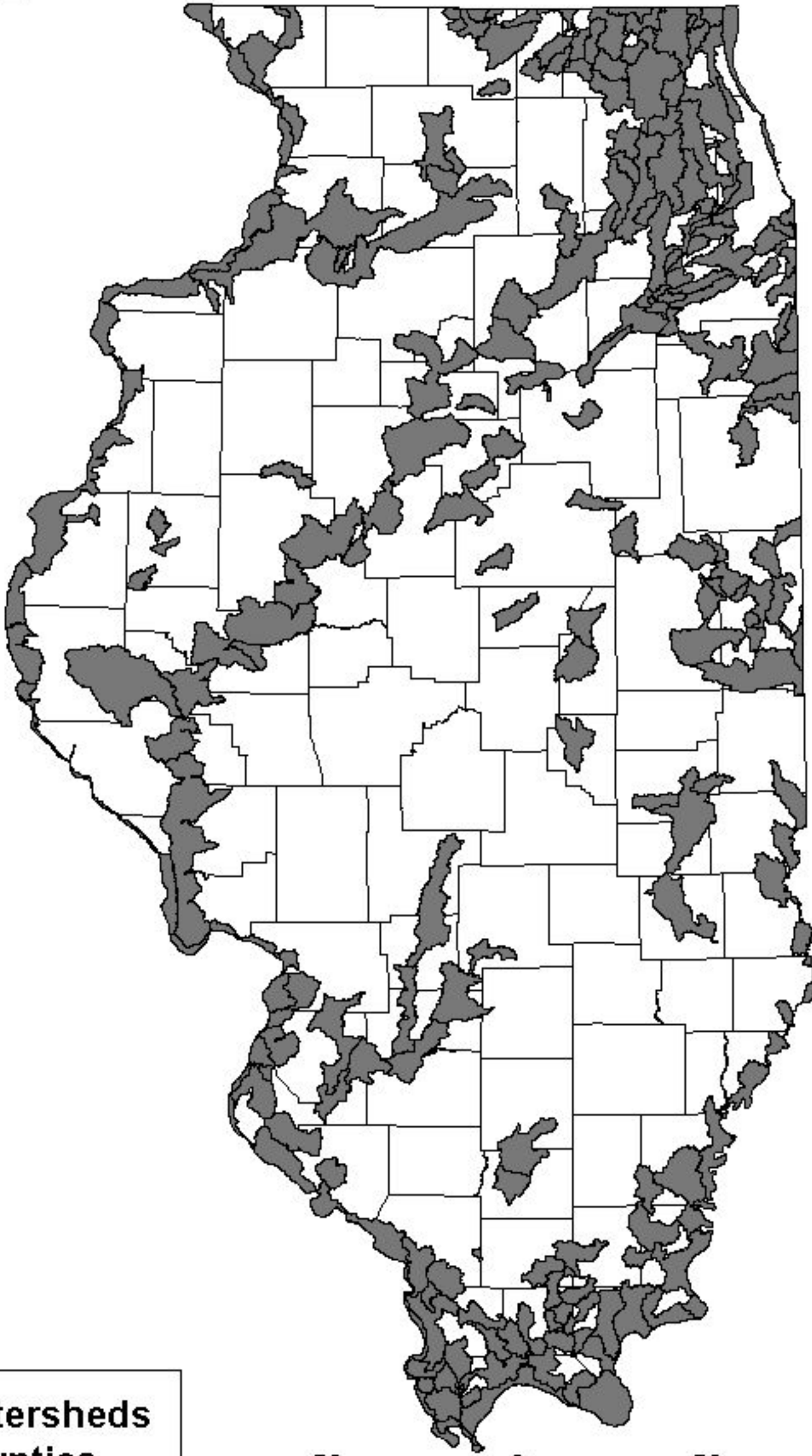
**Waterbody:** A waterbody is any area that in a normal year has water flowing or standing above ground to the extent that evidence of an ordinary high water mark is established. Wetlands contiguous to the waterbody are considered part of the waterbody.

\*\*\* (Nationwide permits where Illinois Environmental Protection Agency has denied Section 401 Water Quality Certification.)

**PCN** - Pre-Construction Notification

**High Value Subwatersheds** - The state of Illinois has defined these areas through a combination of factors. Various sources of information were used to analyze and rank subwatersheds. Federal Threatened and Endangered Species, % of wetlands in the watershed, Natural Areas Inventory, and Biological Stream Categorization were factors used for High Value designation. A map highlighting these areas is attached.

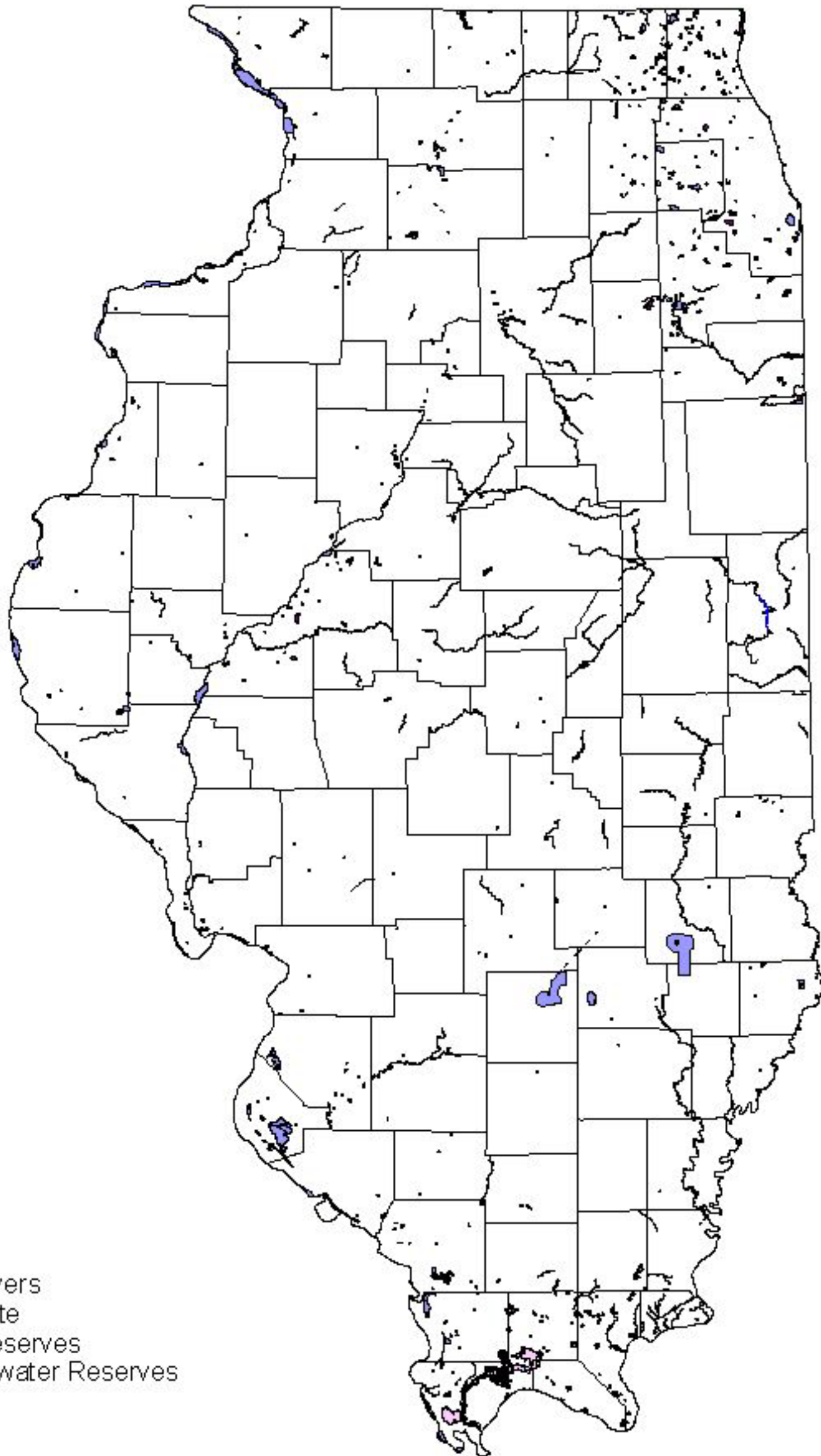
# High Value Subwatersheds



|   |                   |
|---|-------------------|
|  | <b>Watersheds</b> |
|  | <b>Counties</b>   |



# Critical Resource Waters



# REGULATORY JURISDICTIONAL BOUNDARIES

US ARMY CORPS OF ENGINEERS  
 ROCK ISLAND DISTRICT  
 CLOCKTOWER BUILDING  
 P.O. BOX 2004  
 ROCK ISLAND, IL 61204-2004  
 309-794-5373

NORTHEASTERN AREA  
 ILLINOIS DEPT. OF NATURAL RESOURCES  
 OFFICE OF WATER RESOURCES  
 201 WEST CENTER COURT  
 3RD FLOOR EAST  
 SCHAUMBURG, IL 60196-1096  
 708-705-4341

US ARMY CORPS OF ENGINEERS  
 CHICAGO DISTRICT  
 111 NORTH CANAL  
 CHICAGO, IL 60606-7206  
 312-353-6428

ILLINOIS DEPT. OF NATURAL RESOURCES  
 OFFICE OF WATER RESOURCES  
 524 SOUTH SECOND STREET  
 SPRINGFIELD, IL 62701-1767  
 217-782-3863

ILLINOIS DEPT. OF NATURAL RESOURCES  
 OFFICE OF WATER RESOURCES  
 LAKE MICHIGAN MANAGEMENT SECTION  
 ROOM 1606  
 310 SOUTH MICHIGAN  
 CHICAGO, IL 60604  
 312-793-3123

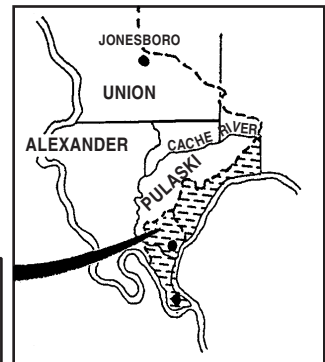
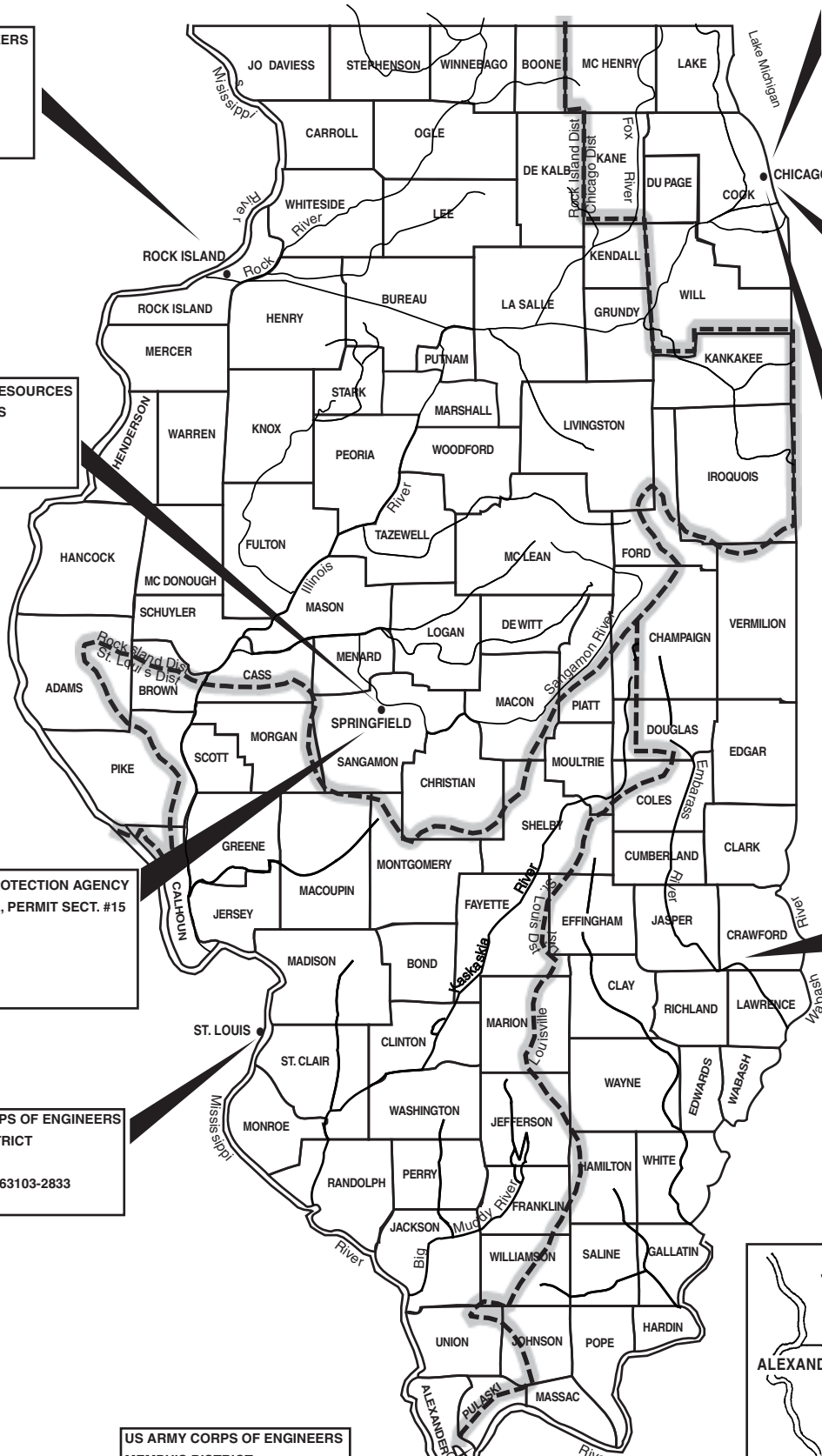
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY  
 WATER POLLUTION CONTROL, PERMIT SECT. #15  
 1021 GRAND AVENUE EAST  
 POST OFFICE BOX 19276  
 SPRINGFIELD, IL 62794-9276  
 217-782-0610

US ARMY CORPS OF ENGINEERS  
 LOUISVILLE DISTRICT  
 P.O. BOX 59  
 LOUISVILLE, KY 40201-0059  
 502-315-6675

US ARMY CORPS OF ENGINEERS  
 ST. LOUIS DISTRICT  
 1222 SPRUCE  
 ST. LOUIS, MO 63103-2833  
 314-331-8575

US ARMY CORPS OF ENGINEERS  
 MEMPHIS DISTRICT  
 167 NORTH MAIN  
 B-202  
 MEMPHIS, TN 38103-1894  
 901-544-3471

NOTE FOR CERTAIN PORTIONS OF  
 LOWER ALEXANDER AND PULASKI  
 COUNTIES, CONTACT THE MEMPHIS  
 DISTRICT FOR INFORMATION







**DEPARTMENT OF THE ARMY**  
ROCK ISLAND DISTRICT, CORPS OF ENGINEERS  
CLOCK TOWER BUILDING - P.O. BOX 2004  
ROCK ISLAND, ILLINOIS 61204-2004

REPLY TO  
ATTENTION OF

<http://www.mvr.usace.army.mil>

May 2, 2006

Operations Division

SUBJECT: CEMVR-OD-P-2006-490

Mr. Joseph E. Crowe, P.E.  
Deputy Director of Highways  
Illinois Department of Transportation  
Region 3 – District 4  
401 Main Street  
Peoria, Illinois 61602-1111



Dear Mr. Crowe:

Our office reviewed all information provided to us concerning the proposed road construction project at the following McDonough County, Illinois sites listed below:

- a. 2006-490A – Box culvert construction in a tributary of Killjordan Creek, Section 16, Township 5 North, Range 3 West;
- b. 2006-490B – box culvert construction in a tributary of Killjordan Creek, Section 16, Township 5 North, Range 3 West;
- c. 2006-490C -- culvert construction in a tributary of Troublesome Creek, Section 19, Township 5 North, Range 3 West;
- d. 2006-490D – culvert construction in a tributary of Troublesome Creek, Section 24, Township 5 North, Range 4 West;
- e. 2006-490E – culvert construction in a tributary of Troublesome Creek, Section 24, Township 5 North, Range 4 West;
- f. 2006-490F -- culvert construction in a tributary of Troublesome Creek, Section 23, Township 5 North, Range 4 West;
- g. 2006-490G -- culvert construction in a tributary of Troublesome Creek, Section 23, Township 5 North, Range 4 West;
- h. 2006-490H – culvert construction in a tributary of Troublesome Creek, Section 23, Township 5 North, Range 4 West;
- i. 2006-490I -- culvert construction in a tributary of Troublesome Creek, Section 22, Township 5 North, Range 4 West;
- j. 2006-490J – culvert construction in a tributary of Troublesome Creek, Section 21, Township 5 North, Range 4 West.

Your project is covered under Item 14 of the enclosed Fact Sheet No. 5(IL), provided you meet the permit conditions for the nationwide permits which are also included in the Fact Sheet. The Corps has also made a determination of no effect on federally threatened and endangered species or critical habitat. The decision regarding this action is based on information found in the administrative record which documents the District's decision-making process, the basis for the decision, and the final decision. The Illinois Environmental Protection Agency (IEPA) also issued Section 401 Water Quality Certification with conditions for this nationwide permit. Please note these additional conditions included in the Fact Sheet. You must also comply with these conditions.

You are encouraged to conduct your construction activities during a period of low flow. You are required to remove all fill material used as a temporary crossing to an upland, non-wetland site, to seed all disturbed areas with native grasses, and to implement appropriate measures to insure that sediments are not introduced into waters of the United States during construction of this project.

Bank and shoreline protection shall consist of suitable clean materials, free from debris, trash, and other deleterious materials. If broken concrete is used as riprap, all reinforcing rods must be cut flush with the surface of the concrete, and individual pieces of concrete shall not exceed 3 feet in any dimension. Asphalt, car bodies, and broken concrete containing asphalt are specifically excluded from this authorization.

McDonough County is within the known breeding range of the federally endangered Indiana Bat (*Myotis sodalis*). The Corps has made a determination of not likely to adversely affect federally threatened and endangered species provided no habitat or potential habitat for listed species will be impacted by the project. If habitat may be affected, then further coordination with the US Fish and Wildlife Service will be necessary.

This verification is valid until March 18, 2007, unless the nationwide permit is modified, reissued, or revoked. It is your responsibility to remain informed of changes to the nationwide permit program. We will issue a public notice announcing the changes if and when they occur. Furthermore, if you commence or are under contract to commence this activity before the date the nationwide permit is modified or revoked, you will have twelve months from the date of the modification or revocation to complete the activity under the present terms and conditions of this nationwide permit.

This letter contains an approved jurisdictional determination for the subject site. If you object to this jurisdictional determination, you may request an administrative appeal under Corps regulations found at 33 CFR Part 331. Enclosed is a Notification of Appeal Process (NAP) fact sheet and Request for Appeal (RFA) form. If you request to appeal this approved jurisdictional determination, you must submit a completed RFA form to the Mississippi Valley Division Office at the following address:

Ms. Elizabeth S. Guynes  
U.S. Army Corps of Engineers  
Mississippi Valley Division  
ATTEN: CEMVD-PD-KM  
Post Office Box 80  
Vicksburg, Mississippi 39181-0080

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR Part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address by June 16, 2006.

It is not necessary to submit an RFA form to the Division Office if you do not object to the approved jurisdictional determination contained in this letter.

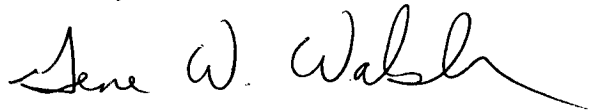
***This letter authorizes the fill activities associated with the bridge structure, but it does not authorize temporary crossings, cofferdams, etc. The permittee must notify the District Engineer, if temporary crossings or dewatering are proposed, in accordance with the "Notification" General Conditions. The notification must also include a restoration plan of reasonable measure to avoid and minimize adverse effects to aquatic resources. The District Engineer will add Special Conditions, where necessary, to ensure environmental adverse effects are minimal. Such conditions may include: limiting the temporary work to the minimum necessary; requiring seasonal restrictions; modifying the restoration plan; and requiring alternative construction methods (e.g. construction mats in wetlands where practicable).***

Although an individual Department of the Army permit and individual IEPA 401 water quality certification will not be required for this project, this does not eliminate the requirement that you must still acquire other applicable Federal, state, and local permits. If you have not already coordinated your project with the Illinois Department of Natural Resources – Office of Water Resources, please contact them at 217/782-3863 to determine if a floodplain development permit is required for your project.

You are required to complete and return the enclosed "Completed Work Certification" upon completion of your project, in accordance with General Condition No. 14 of the enclosed Fact Sheet.

Should you have any questions, please contact our Regulatory Branch by letter, or telephone me at 309/794-5674.

Sincerely,



Gene W. Walsh  
Project Manager  
Enforcement Section

Enclosures

Copies Furnished: (w/o enclosures)

Mr. Mike Diedrichsen, P.E.  
Office of Water Resources  
IL Department of Natural Resources  
One Natural Resources Way  
Springfield, Illinois 62701-1271

Mr. Bruce Yurdin  
Manager, Bureau of Water Section #15  
Watershed Management Section  
Illinois Environmental Protection Agency  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276

U.S. Army Corps of Engineers  
Illinois Waterway Project Office  
257 Grant Street  
Peoria, Illinois 61603

## COMPLETED WORK CERTIFICATION

Permit Number: CEMVR-OD-P-2006-490

Name of Permittee: Illinois Department of Transportation

Date of Issuance: May 2, 2006

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the following address:

U.S. Army Engineer District, Rock Island  
ATTN: Regulatory Division  
Clock Tower Building  
Post Office Box 2004  
Rock Island, Illinois 61204-2004

Please note that your permitted activity is subject to a compliance inspection by a U.S. Army Corps of Engineers representative. If you fail to comply with this permit, you are subject to permit suspension, modification, or revocation.

I hereby certify that the work authorized by the above reference permit has been completed in accordance with the terms and conditions of the said permit, and required mitigation was completed in accordance with the permit conditions.

\_\_\_\_\_  
Signature of Permittee

\_\_\_\_\_  
Date

EW

JURISDICTIONAL DETERMINATION  
U.S. Army Corps of Engineers

Revised 8/13/04

DISTRICT OFFICE: Rock Island District  
FILE NUMBER: 2006-490A

PROJECT LOCATION INFORMATION:

State: Illinois  
County: McDonough  
Center coordinates of site (latitude/longitude): UTM Coordinates: 4477340 (Northing) 691721 (Easting)  
Approximate size of area (parcel) reviewed, including uplands: 1 acres.  
Name of nearest waterway: Killjordan Creek  
Name of watershed: Illinois River

JURISDICTIONAL DETERMINATION

Completed: Desktop determination  Date: April 12, 2006  
Site visit(s)  Date(s):

Jurisdictional Determination (JD):

Preliminary JD - Based on available information,  *there appear to be* (or)  *there appear to be no* "waters of the United States" and/or "navigable waters of the United States" on the project site. A preliminary JD is not appealable (Reference 33 CFR part 331).

Approved JD - An approved JD is an appealable action (Reference 33 CFR part 331).  
Check all that apply:

*There are* "navigable waters of the United States" (as defined by 33 CFR part 329 and associated guidance) within the reviewed area. Approximate size of jurisdictional area: acres.

*There are* "waters of the United States" (as defined by 33 CFR part 328 and associated guidance) within the reviewed area. Approximate size of jurisdictional area: 0.1 acres.

*There are* "isolated, non-navigable, intra-state waters or wetlands" within the reviewed area.  
 Decision supported by SWANCC/Migratory Bird Rule Information Sheet for Determination of No Jurisdiction.

BASIS OF JURISDICTIONAL DETERMINATION:

A. Waters defined under 33 CFR part 329 as "navigable waters of the United States":

The presence of waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

B. Waters defined under 33 CFR part 328.3(a) as "waters of the United States":

(1) The presence of waters, which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide.

(2) The presence of interstate waters including interstate wetlands<sup>1</sup>.

(3) The presence of other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate commerce including any such waters (check all that apply):

(i) which are or could be used by interstate or foreign travelers for recreational or other purposes.

(ii) from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.

(iii) which are or could be used for industrial purposes by industries in interstate commerce.

(4) Impoundments of waters otherwise defined as waters of the US.

(5) The presence of a tributary to a water identified in (1) - (4) above.

(6) The presence of territorial seas.

(7) The presence of wetlands adjacent<sup>2</sup> to other waters of the US, except for those wetlands adjacent to other wetlands.

**Rationale for the Basis of Jurisdictional Determination (applies to any boxes checked above).** *If the jurisdictional water or wetland is not itself a navigable water of the United States, describe connection(s) to the downstream navigable waters. If B(1) or B(3) is used as the Basis of Jurisdiction, document navigability and/or interstate commerce connection (i.e., discuss site conditions, including why the waterbody is navigable and/or how the destruction of the waterbody could affect interstate or foreign commerce). If B(2, 4, 5 or 6) is used as the Basis of Jurisdiction, document the rationale used to make the determination. If B(7) is used as the Basis of Jurisdiction, document the rationale used to make adjacency determination:* The unnamed stream flows into Killjordan Creek which flows into Troublesome Creek which flows into the LaMoine River which is designated a federally navigable waterway.

**Lateral Extent of Jurisdiction:** (Reference: 33 CFR parts 328 and 329)

- Ordinary High Water Mark indicated by:
- clear, natural line impressed on the bank
  - the presence of litter and debris
  - changes in the character of soil
  - destruction of terrestrial vegetation
  - shelving
  - other:
- High Tide Line indicated by:
- oil or scum line along shore objects
  - fine shell or debris deposits (foreshore)
  - physical markings/characteristics
  - tidal gages
  - other:
- Mean High Water Mark indicated by:
- survey to available datum;  physical markings;  vegetation lines/changes in vegetation types.
- Wetland boundaries, as shown on the attached wetland delineation map and/or in a delineation report prepared by:

**Basis For Not Asserting Jurisdiction:**

- The reviewed area consists entirely of uplands.
- Unable to confirm the presence of waters in 33 CFR part 328(a)(1, 2, or 4-7).
- Headquarters declined to approve jurisdiction on the basis of 33 CFR part 328.3(a)(3).
- The Corps has made a case-specific determination that the following waters present on the site are not Waters of the United States:
- Waste treatment systems, including treatment ponds or lagoons, pursuant to 33 CFR part 328.3.
  - Artificially irrigated areas, which would revert to upland if the irrigation ceased.
  - Artificial lakes and ponds created by excavating and/or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing.
  - Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating and/or diking dry land to retain water for primarily aesthetic reasons.
  - Water-filled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States found at 33 CFR 328.3(a).
  - Isolated, intrastate wetland with no nexus to interstate commerce.
  - Prior converted cropland, as determined by the Natural Resources Conservation Service. Explain rationale:
  - Non-tidal drainage or irrigation ditches excavated on dry land. Explain rationale:
  - Other (explain):

**DATA REVIEWED FOR JURISDICTIONAL DETERMINATION (mark all that apply):**

- Maps, plans, plots or plat submitted by or on behalf of the applicant.
- Data sheets prepared/submitted by or on behalf of the applicant.
- This office concurs with the delineation report, dated \_\_\_\_\_, prepared by (company): \_\_\_\_\_
- This office does not concur with the delineation report, dated \_\_\_\_\_, prepared by (company): \_\_\_\_\_
- Data sheets prepared by the Corps.
- Corps' navigable waters' studies:
- U.S. Geological Survey Hydrologic Atlas:
- U.S. Geological Survey 7.5 Minute Topographic maps: Macomb, IL
- U.S. Geological Survey 7.5 Minute Historic quadrangles:
- U.S. Geological Survey 15 Minute Historic quadrangles:
- USDA Natural Resources Conservation Service Soil Survey:
- National wetlands inventory maps: Macomb, IL
- State/Local wetland inventory maps:
- FEMA/FIRM maps (Map Name & Date): \_\_\_\_\_
- 100-year Floodplain Elevation is: \_\_\_\_\_ (NGVD)
- Aerial Photographs (Name & Date): \_\_\_\_\_
- Other photographs (Date): \_\_\_\_\_
- Advanced Identification Wetland maps:
- Site visit/determination conducted on: \_\_\_\_\_
- Applicable/supporting case law: \_\_\_\_\_
- Other information (please specify): \_\_\_\_\_

<sup>1</sup>Wetlands are identified and delineated using the methods and criteria established in the Corps Wetland Delineation Manual (87 Manual) (i.e., occurrence of hydrophytic vegetation, hydric soils and wetland hydrology).

<sup>2</sup>The term "adjacent" means bordering, contiguous, or neighboring. Wetlands separated from other waters of the U.S. by man-made dikes or barriers, natural river berms, beach dunes, and the like are also adjacent.

## NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

|  |  |                        |                   |
|--|--|------------------------|-------------------|
| Applicant: Illinois Department of Transportation |  | File Numbers: 2006-490 | Date: 05/02/06    |
| Attached is:                                     |  |                        | See Section below |
|  | INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission) |                        | A                 |
|  | PROFFERED PERMIT (Standard Permit or Letter of permission)         |                        | B                 |
|  | PERMIT DENIAL  |                        | C                 |
| X  | APPROVED JURISDICTIONAL DETERMINATION                              |                        | D                 |
|  | PRELIMINARY JURISDICTIONAL DETERMINATION                           |                        | E                 |

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at <http://usace.army.mil/inet/functions/cw/cecwo/reg> or Corps regulations at 33 CFR Part 331.

**A: INITIAL PROFFERED PERMIT:** You may accept or object to the permit.

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

**B: PROFFERED PERMIT:** You may accept or appeal the permit

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

**C: PERMIT DENIAL:** You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

**D: APPROVED JURISDICTIONAL DETERMINATION:** You may accept or appeal the approved JD or provide new information.

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

**E: PRELIMINARY JURISDICTIONAL DETERMINATION:** You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.



**Lateral Extent of Jurisdiction:** (Reference: 33 CFR parts 328 and 329)

- Ordinary High Water Mark indicated by:
- clear, natural line impressed on the bank
  - the presence of litter and debris
  - changes in the character of soil
  - destruction of terrestrial vegetation
  - shelving
  - other:
- High Tide Line indicated by:
- oil or scum line along shore objects
  - fine shell or debris deposits (foreshore)
  - physical markings/characteristics
  - tidal gages
  - other:
- Mean High Water Mark indicated by:
- survey to available datum;  physical markings;  vegetation lines/changes in vegetation types.
- Wetland boundaries, as shown on the attached wetland delineation map and/or in a delineation report prepared by:

**Basis For Not Asserting Jurisdiction:**

- The reviewed area consists entirely of uplands.
- Unable to confirm the presence of waters in 33 CFR part 328(a)(1, 2, or 4-7).
- Headquarters declined to approve jurisdiction on the basis of 33 CFR part 328.3(a)(3).
- The Corps has made a case-specific determination that the following waters present on the site are not Waters of the United States:
- Waste treatment systems, including treatment ponds or lagoons, pursuant to 33 CFR part 328.3.
  - Artificially irrigated areas, which would revert to upland if the irrigation ceased.
  - Artificial lakes and ponds created by excavating and/or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing.
  - Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating and/or diking dry land to retain water for primarily aesthetic reasons.
  - Water-filled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States found at 33 CFR 328.3(a).
  - Isolated, intrastate wetland with no nexus to interstate commerce.
  - Prior converted cropland, as determined by the Natural Resources Conservation Service. Explain rationale:
  - Non-tidal drainage or irrigation ditches excavated on dry land. Explain rationale:
  - Other (explain):

**DATA REVIEWED FOR JURISDICTIONAL DETERMINATION (mark all that apply):**

- Maps, plans, plots or plat submitted by or on behalf of the applicant.
- Data sheets prepared/submitted by or on behalf of the applicant.
- This office concurs with the delineation report, dated \_\_\_\_\_, prepared by (company):
  - This office does not concur with the delineation report, dated \_\_\_\_\_, prepared by (company): .
- Data sheets prepared by the Corps.
- Corps' navigable waters' studies:
- U.S. Geological Survey Hydrologic Atlas:
  - U.S. Geological Survey 7.5 Minute Topographic maps: Colchester, IL
  - U.S. Geological Survey 7.5 Minute Historic quadrangles:
  - U.S. Geological Survey 15 Minute Historic quadrangles:
  - USDA Natural Resources Conservation Service Soil Survey:
  - National wetlands inventory maps: Colchester, IL
  - State/Local wetland inventory maps:
  - FEMA/FIRM maps (Map Name & Date):
  - 100-year Floodplain Elevation is: \_\_\_\_\_ (NGVD)
  - Aerial Photographs (Name & Date):
  - Other photographs (Date):
  - Advanced Identification Wetland maps:
  - Site visit/determination conducted on:
  - Applicable/supporting case law:
  - Other information (please specify):

<sup>1</sup>Wetlands are identified and delineated using the methods and criteria established in the Corps Wetland Delineation Manual (87 Manual) (i.e., occurrence of hydrophytic vegetation, hydric soils and wetland hydrology).

<sup>2</sup>The term "adjacent" means bordering, contiguous, or neighboring. Wetlands separated from other waters of the U.S. by man-made dikes or barriers, natural river berms, beach dunes, and the like are also adjacent.

JURISDICTIONAL DETERMINATION  
U.S. Army Corps of Engineers

Revised 8/13/04

DISTRICT OFFICE: Rock Island District  
FILE NUMBER: 2006-490J

PROJECT LOCATION INFORMATION:

State: Illinois  
County: McDonough  
Center coordinates of site (latitude/longitude): UTM Coordinates: 4475065 (Northing) 682417 (Easting)  
Approximate size of area (parcel) reviewed, including uplands: 1 acres.  
Name of nearest waterway: Troublesome Creek  
Name of watershed: Illinois River

JURISDICTIONAL DETERMINATION

Completed: Desktop determination  Date: April 12, 2006  
Site visit(s)  Date(s):

Jurisdictional Determination (JD):

- Preliminary JD - Based on available information,  there appear to be (or)  there appear to be no "waters of the United States" and/or "navigable waters of the United States" on the project site. A preliminary JD is not appealable (Reference 33 CFR part 331).
- Approved JD - An approved JD is an appealable action (Reference 33 CFR part 331).  
Check all that apply:
- There are "navigable waters of the United States" (as defined by 33 CFR part 329 and associated guidance) within the reviewed area. Approximate size of jurisdictional area: acres.
- There are "waters of the United States" (as defined by 33 CFR part 328 and associated guidance) within the reviewed area. Approximate size of jurisdictional area: 0.1 acres.
- There are "isolated, non-navigable, intra-state waters or wetlands" within the reviewed area.  
 Decision supported by SWANCC/Migratory Bird Rule Information Sheet for Determination of No Jurisdiction.

BASIS OF JURISDICTIONAL DETERMINATION:

- A. Waters defined under 33 CFR part 329 as "navigable waters of the United States":
- The presence of waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
- B. Waters defined under 33 CFR part 328.3(a) as "waters of the United States":
- (1) The presence of waters, which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide.
- (2) The presence of interstate waters including interstate wetlands<sup>1</sup>.
- (3) The presence of other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate commerce including any such waters (check all that apply):
- (i) which are or could be used by interstate or foreign travelers for recreational or other purposes.
- (ii) from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- (iii) which are or could be used for industrial purposes by industries in interstate commerce.
- (4) Impoundments of waters otherwise defined as waters of the US.
- (5) The presence of a tributary to a water identified in (1) - (4) above.
- (6) The presence of territorial seas.
- (7) The presence of wetlands adjacent<sup>2</sup> to other waters of the US, except for those wetlands adjacent to other wetlands.

**Rationale for the Basis of Jurisdictional Determination (applies to any boxes checked above).** *If the jurisdictional water or wetland is not itself a navigable water of the United States, describe connection(s) to the downstream navigable waters. If B(1) or B(3) is used as the Basis of Jurisdiction, document navigability and/or interstate commerce connection (i.e., discuss site conditions, including why the waterbody is navigable and/or how the destruction of the waterbody could affect interstate or foreign commerce). If B(2, 4, 5 or 6) is used as the Basis of Jurisdiction, document the rationale used to make the determination. If B(7) is used as the Basis of Jurisdiction, document the rationale used to make adjacency determination:* The unnamed stream flows into Troublesome Creek which flows into the LaMoine River which is designated a federally navigable waterway.

**Lateral Extent of Jurisdiction:** (Reference: 33 CFR parts 328 and 329)

- Ordinary High Water Mark indicated by:
- clear, natural line impressed on the bank
  - the presence of litter and debris
  - changes in the character of soil
  - destruction of terrestrial vegetation
  - shelving
  - other:
- High Tide Line indicated by:
- oil or scum line along shore objects
  - fine shell or debris deposits (foreshore)
  - physical markings/characteristics
  - tidal gages
  - other:
- Mean High Water Mark indicated by:
- survey to available datum;  physical markings;  vegetation lines/changes in vegetation types.
- Wetland boundaries, as shown on the attached wetland delineation map and/or in a delineation report prepared by:

**Basis For Not Asserting Jurisdiction:**

- The reviewed area consists entirely of uplands.
- Unable to confirm the presence of waters in 33 CFR part 328(a)(1, 2, or 4-7).
- Headquarters declined to approve jurisdiction on the basis of 33 CFR part 328.3(a)(3).
- The Corps has made a case-specific determination that the following waters present on the site are not Waters of the United States:
- Waste treatment systems, including treatment ponds or lagoons, pursuant to 33 CFR part 328.3.
  - Artificially irrigated areas, which would revert to upland if the irrigation ceased.
  - Artificial lakes and ponds created by excavating and/or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing.
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  - Isolated, intrastate wetland with no nexus to interstate commerce.
  - Prior converted cropland, as determined by the Natural Resources Conservation Service. Explain rationale:
  - Non-tidal drainage or irrigation ditches excavated on dry land. Explain rationale:
  - Other (explain):

**DATA REVIEWED FOR JURISDICTIONAL DETERMINATION (mark all that apply):**

- Maps, plans, plots or plat submitted by or on behalf of the applicant.
- Data sheets prepared/submitted by or on behalf of the applicant.
- This office concurs with the delineation report, dated \_\_\_\_\_, prepared by (company):
  - This office does not concur with the delineation report, dated \_\_\_\_\_, prepared by (company): .
- Data sheets prepared by the Corps.
- Corps' navigable waters' studies:
- U.S. Geological Survey Hydrologic Atlas:
  - U.S. Geological Survey 7.5 Minute Topographic maps: Colchester, IL
  - U.S. Geological Survey 7.5 Minute Historic quadrangles:
  - U.S. Geological Survey 15 Minute Historic quadrangles:
  - USDA Natural Resources Conservation Service Soil Survey:
  - National wetlands inventory maps: Colchester, IL
  - State/Local wetland inventory maps:
  - FEMA/FIRM maps (Map Name & Date):
  - 100-year Floodplain Elevation is: \_\_\_\_\_ (NGVD)
  - Aerial Photographs (Name & Date):
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  - Site visit/determination conducted on:
  - Applicable/supporting case law:
  - Other information (please specify):

<sup>1</sup>Wetlands are identified and delineated using the methods and criteria established in the Corps Wetland Delineation Manual (87 Manual) (i.e., occurrence of hydrophytic vegetation, hydric soils and wetland hydrology).

<sup>2</sup>The term "adjacent" means bordering, contiguous, or neighboring. Wetlands separated from other waters of the U.S. by man-made dikes or barriers, natural river berms, beach dunes, and the like are also adjacent.

DISTRICT OFFICE: Rock Island District  
FILE NUMBER: 2006-4901

**PROJECT LOCATION INFORMATION:**

State: Illinois  
County: McDonough  
Center coordinates of site (latitude/longitude): UTM Coordinates: 4475075 (Northing) 683108 (Easting)  
Approximate size of area (parcel) reviewed, including uplands: 1 acres.  
Name of nearest waterway: Troublesome Creek  
Name of watershed: Illinois River

**JURISDICTIONAL DETERMINATION**

Completed: Desktop determination  Date: April 12, 2006  
Site visit(s)  Date(s):

**Jurisdictional Determination (JD):**

- Preliminary JD - Based on available information,  *there appear to be* (or)  *there appear to be no* "waters of the United States" and/or "navigable waters of the United States" on the project site. A preliminary JD is not appealable (Reference 33 CFR part 331).
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Check all that apply:
- There are* "navigable waters of the United States" (as defined by 33 CFR part 329 and associated guidance) within the reviewed area. Approximate size of jurisdictional area: acres.
- There are* "waters of the United States" (as defined by 33 CFR part 328 and associated guidance) within the reviewed area. Approximate size of jurisdictional area: 0.1 acres.
- There are* "isolated, non-navigable, intra-state waters or wetlands" within the reviewed area.  
 Decision supported by SWANCC/Migratory Bird Rule Information Sheet for Determination of No Jurisdiction.

**BASIS OF JURISDICTIONAL DETERMINATION:**

**A. Waters defined under 33 CFR part 329 as "navigable waters of the United States":**

- The presence of waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

**B. Waters defined under 33 CFR part 328.3(a) as "waters of the United States":**

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**Rationale for the Basis of Jurisdictional Determination (applies to any boxes checked above).** *If the jurisdictional water or wetland is not itself a navigable water of the United States, describe connection(s) to the downstream navigable waters. If B(1) or B(3) is used as the Basis of Jurisdiction, document navigability and/or interstate commerce connection (i.e., discuss site conditions, including why the waterbody is navigable and/or how the destruction of the waterbody could affect interstate or foreign commerce). If B(2, 4, 5 or 6) is used as the Basis of Jurisdiction, document the rationale used to make the determination. If B(7) is used as the Basis of Jurisdiction, document the rationale used to make adjacency determination:* The unnamed stream flows into Troublesome Creek which flows into the LaMoine River which is designated a federally navigable waterway.

**Lateral Extent of Jurisdiction:** (Reference: 33 CFR parts 328 and 329)

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  - other:
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**Basis For Not Asserting Jurisdiction:**

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- Headquarters declined to approve jurisdiction on the basis of 33 CFR part 328.3(a)(3).
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  - Prior converted cropland, as determined by the Natural Resources Conservation Service. Explain rationale:
  - Non-tidal drainage or irrigation ditches excavated on dry land. Explain rationale:
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- U.S. Geological Survey 15 Minute Historic quadrangles:
- USDA Natural Resources Conservation Service Soil Survey:
- National wetlands inventory maps: Colchester, IL
- State/Local wetland inventory maps:
- FEMA/FIRM maps (Map Name & Date):
- 100-year Floodplain Elevation is: \_\_\_\_\_ (NGVD)
- Aerial Photographs (Name & Date):
- Other photographs (Date):
- Advanced Identification Wetland maps:
- Site visit/determination conducted on:
- Applicable/supporting case law:
- Other information (please specify):

<sup>1</sup>Wetlands are identified and delineated using the methods and criteria established in the Corps Wetland Delineation Manual (87 Manual) (i.e., occurrence of hydrophytic vegetation, hydric soils and wetland hydrology).

<sup>2</sup>The term "adjacent" means bordering, contiguous, or neighboring. Wetlands separated from other waters of the U.S. by man-made dikes or barriers, natural river berms, beach dunes, and the like are also adjacent.

**DISTRICT OFFICE:** Rock Island District  
**FILE NUMBER:** 2006-490H

**PROJECT LOCATION INFORMATION:**

State: Illinois  
County: McDonough  
Center coordinates of site (latitude/longitude): UTM Coordinates: 4475076 (Northing) 684203 (Easting)  
Approximate size of area (parcel) reviewed, including uplands: 1 acres.  
Name of nearest waterway: Troublesome Creek  
Name of watershed: Illinois River

**JURISDICTIONAL DETERMINATION**

**Completed:** Desktop determination  Date: April 12, 2006  
Site visit(s)  Date(s):

**Jurisdictional Determination (JD):**

- Preliminary JD - Based on available information,  *there appear to be* (or)  *there appear to be no* "waters of the United States" and/or "navigable waters of the United States" on the project site. A preliminary JD is not appealable (Reference 33 CFR part 331).
- Approved JD - An approved JD is an appealable action (Reference 33 CFR part 331).  
Check all that apply:
- There are* "navigable waters of the United States" (as defined by 33 CFR part 329 and associated guidance) within the reviewed area. Approximate size of jurisdictional area: acres.
- There are* "waters of the United States" (as defined by 33 CFR part 328 and associated guidance) within the reviewed area. Approximate size of jurisdictional area: 0.1 acres.
- There are* "isolated, non-navigable, intra-state waters or wetlands" within the reviewed area.  
 Decision supported by SWANCC/Migratory Bird Rule Information Sheet for Determination of No Jurisdiction.

**BASIS OF JURISDICTIONAL DETERMINATION:**

- A. Waters defined under 33 CFR part 329 as "navigable waters of the United States":**
- The presence of waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
- B. Waters defined under 33 CFR part 328.3(a) as "waters of the United States":**
- (1) The presence of waters, which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide.
- (2) The presence of interstate waters including interstate wetlands<sup>1</sup>.
- (3) The presence of other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate commerce including any such waters (check all that apply):
- (i) which are or could be used by interstate or foreign travelers for recreational or other purposes.
- (ii) from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- (iii) which are or could be used for industrial purposes by industries in interstate commerce.
- (4) Impoundments of waters otherwise defined as waters of the US.
- (5) The presence of a tributary to a water identified in (1) - (4) above.
- (6) The presence of territorial seas.
- (7) The presence of wetlands adjacent<sup>2</sup> to other waters of the US, except for those wetlands adjacent to other wetlands.

**Rationale for the Basis of Jurisdictional Determination (applies to any boxes checked above).** *If the jurisdictional water or wetland is not itself a navigable water of the United States, describe connection(s) to the downstream navigable waters. If B(1) or B(3) is used as the Basis of Jurisdiction, document navigability and/or interstate commerce connection (i.e., discuss site conditions, including why the waterbody is navigable and/or how the destruction of the waterbody could affect interstate or foreign commerce). If B(2, 4, 5 or 6) is used as the Basis of Jurisdiction, document the rationale used to make the determination. If B(7) is used as the Basis of Jurisdiction, document the rationale used to make adjacency determination:* The unnamed stream flows into Troublesome Creek which flows into the LaMoine River which is designated a federally navigable waterway.

**Lateral Extent of Jurisdiction:** (Reference: 33 CFR parts 328 and 329)

- Ordinary High Water Mark indicated by:
- clear, natural line impressed on the bank
  - the presence of litter and debris
  - changes in the character of soil
  - destruction of terrestrial vegetation
  - shelving
  - other:
- High Tide Line indicated by:
- oil or scum line along shore objects
  - fine shell or debris deposits (foreshore)
  - physical markings/characteristics
  - tidal gages
  - other:
- Mean High Water Mark indicated by:
- survey to available datum;  physical markings;  vegetation lines/changes in vegetation types.
- Wetland boundaries, as shown on the attached wetland delineation map and/or in a delineation report prepared by:

**Basis For Not Asserting Jurisdiction:**

- The reviewed area consists entirely of uplands.
- Unable to confirm the presence of waters in 33 CFR part 328(a)(1, 2, or 4-7).
- Headquarters declined to approve jurisdiction on the basis of 33 CFR part 328.3(a)(3).
- The Corps has made a case-specific determination that the following waters present on the site are not Waters of the United States:
- Waste treatment systems, including treatment ponds or lagoons, pursuant to 33 CFR part 328.3.
  - Artificially irrigated areas, which would revert to upland if the irrigation ceased.
  - Artificial lakes and ponds created by excavating and/or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing.
  - Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating and/or diking dry land to retain water for primarily aesthetic reasons.
  - Water-filled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States found at 33 CFR 328.3(a).
  - Isolated, intrastate wetland with no nexus to interstate commerce.
  - Prior converted cropland, as determined by the Natural Resources Conservation Service. Explain rationale:
  - Non-tidal drainage or irrigation ditches excavated on dry land. Explain rationale:
  - Other (explain):

**DATA REVIEWED FOR JURISDICTIONAL DETERMINATION (mark all that apply):**

- Maps, plans, plots or plat submitted by or on behalf of the applicant.
- Data sheets prepared/submitted by or on behalf of the applicant.
  - This office concurs with the delineation report, dated \_\_\_\_\_, prepared by (company):
  - This office does not concur with the delineation report, dated \_\_\_\_\_, prepared by (company): .
- Data sheets prepared by the Corps.
- Corps' navigable waters' studies:
- U.S. Geological Survey Hydrologic Atlas:
- U.S. Geological Survey 7.5 Minute Topographic maps: Colchester, IL
- U.S. Geological Survey 7.5 Minute Historic quadrangles:
- U.S. Geological Survey 15 Minute Historic quadrangles:
- USDA Natural Resources Conservation Service Soil Survey:
- National wetlands inventory maps: Colchester, IL
- State/Local wetland inventory maps:
- FEMA/FIRM maps (Map Name & Date):
- 100-year Floodplain Elevation is: \_\_\_\_\_ (NGVD)
- Aerial Photographs (Name & Date):
- Other photographs (Date):
- Advanced Identification Wetland maps:
- Site visit/determination conducted on:
- Applicable/supporting case law:
- Other information (please specify):

<sup>1</sup>Wetlands are identified and delineated using the methods and criteria established in the Corps Wetland Delineation Manual (87 Manual) (i.e., occurrence of hydrophytic vegetation, hydric soils and wetland hydrology).

<sup>2</sup>The term "adjacent" means bordering, contiguous, or neighboring. Wetlands separated from other waters of the U.S. by man-made dikes or barriers, natural river berms, beach dunes, and the like are also adjacent.

**JURISDICTIONAL DETERMINATION**  
U.S. Army Corps of Engineers

Revised 8/13/04

**DISTRICT OFFICE:** Rock Island District  
**FILE NUMBER:** 2006-490G

**PROJECT LOCATION INFORMATION:**

State: Illinois  
County: McDonough  
Center coordinates of site (latitude/longitude): UTM Coordinates: 4475146 (Northing) 685429 (Easting)  
Approximate size of area (parcel) reviewed, including uplands: 1 acres.  
Name of nearest waterway: Troublesome Creek  
Name of watershed: Illinois River

**JURISDICTIONAL DETERMINATION**

**Completed:** Desktop determination  Date: April 12, 2006  
Site visit(s)  Date(s):

**Jurisdictional Determination (JD):**

- Preliminary JD - Based on available information,  *there appear to be* (or)  *there appear to be no* "waters of the United States" and/or "navigable waters of the United States" on the project site. A preliminary JD is not appealable (Reference 33 CFR part 331).
- Approved JD - An approved JD is an appealable action (Reference 33 CFR part 331).  
Check all that apply:
- There are* "navigable waters of the United States" (as defined by 33 CFR part 329 and associated guidance) within the reviewed area. Approximate size of jurisdictional area: acres.
- There are* "waters of the United States" (as defined by 33 CFR part 328 and associated guidance) within the reviewed area. Approximate size of jurisdictional area: 0.1 acres.
- There are* "isolated, non-navigable, intra-state waters or wetlands" within the reviewed area.  
 Decision supported by SWANCC/Migratory Bird Rule Information Sheet for Determination of No Jurisdiction.

**BASIS OF JURISDICTIONAL DETERMINATION:**

**A. Waters defined under 33 CFR part 329 as "navigable waters of the United States":**

- The presence of waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

**B. Waters defined under 33 CFR part 328.3(a) as "waters of the United States":**

- (1) The presence of waters, which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide.
- (2) The presence of interstate waters including interstate wetlands<sup>1</sup>.
- (3) The presence of other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate commerce including any such waters (check all that apply):
- (i) which are or could be used by interstate or foreign travelers for recreational or other purposes.
- (ii) from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- (iii) which are or could be used for industrial purposes by industries in interstate commerce.
- (4) Impoundments of waters otherwise defined as waters of the US.
- (5) The presence of a tributary to a water identified in (1) - (4) above.
- (6) The presence of territorial seas.
- (7) The presence of wetlands adjacent<sup>2</sup> to other waters of the US, except for those wetlands adjacent to other wetlands.

**Rationale for the Basis of Jurisdictional Determination (applies to any boxes checked above).** *If the jurisdictional water or wetland is not itself a navigable water of the United States, describe connection(s) to the downstream navigable waters. If B(1) or B(3) is used as the Basis of Jurisdiction, document navigability and/or interstate commerce connection (i.e., discuss site conditions, including why the waterbody is navigable and/or how the destruction of the waterbody could affect interstate or foreign commerce). If B(2, 4, 5 or 6) is used as the Basis of Jurisdiction, document the rationale used to make the determination. If B(7) is used as the Basis of Jurisdiction, document the rationale used to make adjacency determination:* The unnamed stream flows into Troublesome Creek which flows into the LaMoine River which is designated a federally navigable waterway.



**Lateral Extent of Jurisdiction:** (Reference: 33 CFR parts 328 and 329)

- Ordinary High Water Mark indicated by:
- clear, natural line impressed on the bank
  - the presence of litter and debris
  - changes in the character of soil
  - destruction of terrestrial vegetation
  - shelving
  - other:
- High Tide Line indicated by:
- oil or scum line along shore objects
  - fine shell or debris deposits (foreshore)
  - physical markings/characteristics
  - tidal gages
  - other:
- Mean High Water Mark indicated by:
- survey to available datum;  physical markings;  vegetation lines/changes in vegetation types.
- Wetland boundaries, as shown on the attached wetland delineation map and/or in a delineation report prepared by:

**Basis For Not Asserting Jurisdiction:**

- The reviewed area consists entirely of uplands.
- Unable to confirm the presence of waters in 33 CFR part 328(a)(1, 2, or 4-7).
- Headquarters declined to approve jurisdiction on the basis of 33 CFR part 328.3(a)(3).
- The Corps has made a case-specific determination that the following waters present on the site are not Waters of the United States:
- Waste treatment systems, including treatment ponds or lagoons, pursuant to 33 CFR part 328.3.
  - Artificially irrigated areas, which would revert to upland if the irrigation ceased.
  - Artificial lakes and ponds created by excavating and/or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing.
  - Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating and/or diking dry land to retain water for primarily aesthetic reasons.
  - Water-filled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States found at 33 CFR 328.3(a).
  - Isolated, intrastate wetland with no nexus to interstate commerce.
  - Prior converted cropland, as determined by the Natural Resources Conservation Service. Explain rationale:
  - Non-tidal drainage or irrigation ditches excavated on dry land. Explain rationale:
  - Other (explain):

**DATA REVIEWED FOR JURISDICTIONAL DETERMINATION (mark all that apply):**

- Maps, plans, plots or plat submitted by or on behalf of the applicant.
- Data sheets prepared/submitted by or on behalf of the applicant.
- This office concurs with the delineation report, dated \_\_\_\_\_, prepared by (company):
  - This office does not concur with the delineation report, dated \_\_\_\_\_, prepared by (company): .
- Data sheets prepared by the Corps.
- Corps' navigable waters' studies:
- U.S. Geological Survey Hydrologic Atlas:
  - U.S. Geological Survey 7.5 Minute Topographic maps: Colchester, IL
  - U.S. Geological Survey 7.5 Minute Historic quadrangles:
  - U.S. Geological Survey 15 Minute Historic quadrangles:
  - USDA Natural Resources Conservation Service Soil Survey:
  - National wetlands inventory maps: Colchester, IL
  - State/Local wetland inventory maps:
  - FEMA/FIRM maps (Map Name & Date):
  - 100-year Floodplain Elevation is: \_\_\_\_\_ (NGVD)
  - Aerial Photographs (Name & Date):
  - Other photographs (Date):
  - Advanced Identification Wetland maps:
  - Site visit/determination conducted on:
  - Applicable/supporting case law:
  - Other information (please specify):

<sup>1</sup>Wetlands are identified and delineated using the methods and criteria established in the Corps Wetland Delineation Manual (87 Manual) (i.e., occurrence of hydrophytic vegetation, hydric soils and wetland hydrology).

<sup>2</sup>The term "adjacent" means bordering, contiguous, or neighboring. Wetlands separated from other waters of the U.S. by man-made dikes or barriers, natural river berms, beach dunes, and the like are also adjacent.

DISTRICT OFFICE: Rock Island District  
FILE NUMBER: 2006-490F

PROJECT LOCATION INFORMATION:

State: Illinois  
County: McDonough  
Center coordinates of site (latitude/longitude): UTM Coordinates: 4475146 (Northing) 685429 (Easting)  
Approximate size of area (parcel) reviewed, including uplands: 1 acres.  
Name of nearest waterway: Troublesome Creek  
Name of watershed: Illinois River

JURISDICTIONAL DETERMINATION

Completed: Desktop determination  Date: April 12, 2006  
Site visit(s)  Date(s):

Jurisdictional Determination (JD):

- Preliminary JD - Based on available information,  *there appear to be* (or)  *there appear to be no* "waters of the United States" and/or "navigable waters of the United States" on the project site. A preliminary JD is not appealable (Reference 33 CFR part 331).
- Approved JD - An approved JD is an appealable action (Reference 33 CFR part 331).  
Check all that apply:
- There are* "navigable waters of the United States" (as defined by 33 CFR part 329 and associated guidance) within the reviewed area. Approximate size of jurisdictional area: acres.
- There are* "waters of the United States" (as defined by 33 CFR part 328 and associated guidance) within the reviewed area. Approximate size of jurisdictional area: 0.1 acres.
- There are* "isolated, non-navigable, intra-state waters or wetlands" within the reviewed area.  
 Decision supported by SWANCC/Migratory Bird Rule Information Sheet for Determination of No Jurisdiction.

BASIS OF JURISDICTIONAL DETERMINATION:

A. Waters defined under 33 CFR part 329 as "navigable waters of the United States":

- The presence of waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

B. Waters defined under 33 CFR part 328.3(a) as "waters of the United States":

- (1) The presence of waters, which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide.
- (2) The presence of interstate waters including interstate wetlands<sup>1</sup>.
- (3) The presence of other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate commerce including any such waters (check all that apply):
- (i) which are or could be used by interstate or foreign travelers for recreational or other purposes.
- (ii) from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- (iii) which are or could be used for industrial purposes by industries in interstate commerce.
- (4) Impoundments of waters otherwise defined as waters of the US.
- (5) The presence of a tributary to a water identified in (1) - (4) above.
- (6) The presence of territorial seas.
- (7) The presence of wetlands adjacent<sup>2</sup> to other waters of the US, except for those wetlands adjacent to other wetlands.

**Rationale for the Basis of Jurisdictional Determination (applies to any boxes checked above).** *If the jurisdictional water or wetland is not itself a navigable water of the United States, describe connection(s) to the downstream navigable waters. If B(1) or B(3) is used as the Basis of Jurisdiction, document navigability and/or interstate commerce connection (i.e., discuss site conditions, including why the waterbody is navigable and/or how the destruction of the waterbody could affect interstate or foreign commerce). If B(2, 4, 5 or 6) is used as the Basis of Jurisdiction, document the rationale used to make the determination. If B(7) is used as the Basis of Jurisdiction, document the rationale used to make adjacency determination:* The unnamed stream flows into Troublesome Creek which flows into the LaMoine River which is designated a federally navigable waterway.

**Lateral Extent of Jurisdiction:** (Reference: 33 CFR parts 328 and 329)

- Ordinary High Water Mark indicated by:
- clear, natural line impressed on the bank
  - the presence of litter and debris
  - changes in the character of soil
  - destruction of terrestrial vegetation
  - shelving
  - other:
- High Tide Line indicated by:
- oil or scum line along shore objects
  - fine shell or debris deposits (foreshore)
  - physical markings/characteristics
  - tidal gages
  - other:
- Mean High Water Mark indicated by:
- survey to available datum;  physical markings;  vegetation lines/changes in vegetation types.
- Wetland boundaries, as shown on the attached wetland delineation map and/or in a delineation report prepared by:

**Basis For Not Asserting Jurisdiction:**

- The reviewed area consists entirely of uplands.
- Unable to confirm the presence of waters in 33 CFR part 328(a)(1, 2, or 4-7).
- Headquarters declined to approve jurisdiction on the basis of 33 CFR part 328.3(a)(3).
- The Corps has made a case-specific determination that the following waters present on the site are not Waters of the United States:
- Waste treatment systems, including treatment ponds or lagoons, pursuant to 33 CFR part 328.3.
  - Artificially irrigated areas, which would revert to upland if the irrigation ceased.
  - Artificial lakes and ponds created by excavating and/or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing.
  - Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating and/or diking dry land to retain water for primarily aesthetic reasons.
  - Water-filled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States found at 33 CFR 328.3(a).
  - Isolated, intrastate wetland with no nexus to interstate commerce.
  - Prior converted cropland, as determined by the Natural Resources Conservation Service. Explain rationale:
  - Non-tidal drainage or irrigation ditches excavated on dry land. Explain rationale:
  - Other (explain):

**DATA REVIEWED FOR JURISDICTIONAL DETERMINATION (mark all that apply):**

- Maps, plans, plots or plat submitted by or on behalf of the applicant.
- Data sheets prepared/submitted by or on behalf of the applicant.
- This office concurs with the delineation report, dated \_\_\_\_\_, prepared by (company):
  - This office does not concur with the delineation report, dated \_\_\_\_\_, prepared by (company): .
- Data sheets prepared by the Corps.
- Corps' navigable waters' studies:
- U.S. Geological Survey Hydrologic Atlas:
  - U.S. Geological Survey 7.5 Minute Topographic maps: Colchester, IL
  - U.S. Geological Survey 7.5 Minute Historic quadrangles:
  - U.S. Geological Survey 15 Minute Historic quadrangles:
  - USDA Natural Resources Conservation Service Soil Survey:
  - National wetlands inventory maps: Colchester, IL
  - State/Local wetland inventory maps:
  - FEMA/FIRM maps (Map Name & Date):
  - 100-year Floodplain Elevation is: \_\_\_\_\_ (NGVD)
  - Aerial Photographs (Name & Date):
  - Other photographs (Date):
  - Advanced Identification Wetland maps:
  - Site visit/determination conducted on:
  - Applicable/supporting case law:
  - Other information (please specify):

<sup>1</sup>Wetlands are identified and delineated using the methods and criteria established in the Corps Wetland Delineation Manual (87 Manual) (i.e., occurrence of hydrophytic vegetation, hydric soils and wetland hydrology).

<sup>2</sup>The term "adjacent" means bordering, contiguous, or neighboring. Wetlands separated from other waters of the U.S. by man-made dikes or barriers, natural river berms, beach dunes, and the like are also adjacent.

DISTRICT OFFICE: Rock Island District  
FILE NUMBER: 2006-490E

PROJECT LOCATION INFORMATION:

State: Illinois  
County: McDonough  
Center coordinates of site (latitude/longitude): UTM Coordinates: 4475164 (Northing) 686132 (Easting)  
Approximate size of area (parcel) reviewed, including uplands: 1 acres.  
Name of nearest waterway: Troublesome Creek  
Name of watershed: Illinois River

JURISDICTIONAL DETERMINATION

Completed: Desktop determination  Date: April 12, 2006  
Site visit(s)  Date(s):

Jurisdictional Determination (JD):

- Preliminary JD - Based on available information,  *there appear to be* (or)  *there appear to be no* "waters of the United States" and/or "navigable waters of the United States" on the project site. A preliminary JD is not appealable (Reference 33 CFR part 331).
- Approved JD - An approved JD is an appealable action (Reference 33 CFR part 331).  
Check all that apply:
  - There are* "navigable waters of the United States" (as defined by 33 CFR part 329 and associated guidance) within the reviewed area. Approximate size of jurisdictional area: acres.
  - There are* "waters of the United States" (as defined by 33 CFR part 328 and associated guidance) within the reviewed area. Approximate size of jurisdictional area: 0.1 acres.
  - There are* "isolated, non-navigable, intra-state waters or wetlands" within the reviewed area.
    - Decision supported by SWANCC/Migratory Bird Rule Information Sheet for Determination of No Jurisdiction.

BASIS OF JURISDICTIONAL DETERMINATION:

- A. Waters defined under 33 CFR part 329 as "navigable waters of the United States":
  - The presence of waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
- B. Waters defined under 33 CFR part 328.3(a) as "waters of the United States":
  - (1) The presence of waters, which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide.
  - (2) The presence of interstate waters including interstate wetlands<sup>1</sup>.
  - (3) The presence of other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate commerce including any such waters (check all that apply):
    - (i) which are or could be used by interstate or foreign travelers for recreational or other purposes.
    - (ii) from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
    - (iii) which are or could be used for industrial purposes by industries in interstate commerce.
  - (4) Impoundments of waters otherwise defined as waters of the US.
  - (5) The presence of a tributary to a water identified in (1) - (4) above.
  - (6) The presence of territorial seas.
  - (7) The presence of wetlands adjacent<sup>2</sup> to other waters of the US, except for those wetlands adjacent to other wetlands.

**Rationale for the Basis of Jurisdictional Determination (applies to any boxes checked above).** *If the jurisdictional water or wetland is not itself a navigable water of the United States, describe connection(s) to the downstream navigable waters. If B(1) or B(3) is used as the Basis of Jurisdiction, document navigability and/or interstate commerce connection (i.e., discuss site conditions, including why the waterbody is navigable and/or how the destruction of the waterbody could affect interstate or foreign commerce). If B(2, 4, 5 or 6) is used as the Basis of Jurisdiction, document the rationale used to make the determination. If B(7) is used as the Basis of Jurisdiction, document the rationale used to make adjacency determination:* The unnamed stream flows into Troublesome Creek which flows into the LaMoine River which is designated a federally navigable waterway.

**Lateral Extent of Jurisdiction:** (Reference: 33 CFR parts 328 and 329)

- Ordinary High Water Mark indicated by:
- clear, natural line impressed on the bank
  - the presence of litter and debris
  - changes in the character of soil
  - destruction of terrestrial vegetation
  - shelving
  - other:
- High Tide Line indicated by:
- oil or scum line along shore objects
  - fine shell or debris deposits (foreshore)
  - physical markings/characteristics
  - tidal gages
  - other:
- Mean High Water Mark indicated by:
- survey to available datum;  physical markings;  vegetation lines/changes in vegetation types.
- Wetland boundaries, as shown on the attached wetland delineation map and/or in a delineation report prepared by:

**Basis For Not Asserting Jurisdiction:**

- The reviewed area consists entirely of uplands.
- Unable to confirm the presence of waters in 33 CFR part 328(a)(1, 2, or 4-7).
- Headquarters declined to approve jurisdiction on the basis of 33 CFR part 328.3(a)(3).
- The Corps has made a case-specific determination that the following waters present on the site are not Waters of the United States:
- Waste treatment systems, including treatment ponds or lagoons, pursuant to 33 CFR part 328.3.
  - Artificially irrigated areas, which would revert to upland if the irrigation ceased.
  - Artificial lakes and ponds created by excavating and/or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing.
  - Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating and/or diking dry land to retain water for primarily aesthetic reasons.
  - Water-filled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States found at 33 CFR 328.3(a).
  - Isolated, intrastate wetland with no nexus to interstate commerce.
  - Prior converted cropland, as determined by the Natural Resources Conservation Service. Explain rationale:
  - Non-tidal drainage or irrigation ditches excavated on dry land. Explain rationale:
  - Other (explain):

**DATA REVIEWED FOR JURISDICTIONAL DETERMINATION (mark all that apply):**

- Maps, plans, plots or plat submitted by or on behalf of the applicant.
- Data sheets prepared/submitted by or on behalf of the applicant.
- This office concurs with the delineation report, dated \_\_\_\_\_, prepared by (company):
- This office does not concur with the delineation report, dated \_\_\_\_\_, prepared by (company): .
- Data sheets prepared by the Corps.
- Corps' navigable waters' studies:
- U.S. Geological Survey Hydrologic Atlas:
- U.S. Geological Survey 7.5 Minute Topographic maps: Colchester, IL
- U.S. Geological Survey 7.5 Minute Historic quadrangles:
- U.S. Geological Survey 15 Minute Historic quadrangles:
- USDA Natural Resources Conservation Service Soil Survey:
- National wetlands inventory maps: Colchester, IL
- State/Local wetland inventory maps:
- FEMA/FIRM maps (Map Name & Date):
- 100-year Floodplain Elevation is: \_\_\_\_\_ (NGVD)
- Aerial Photographs (Name & Date):
- Other photographs (Date):
- Advanced Identification Wetland maps:
- Site visit/determination conducted on:
- Applicable/supporting case law:
- Other information (please specify):

<sup>1</sup>Wetlands are identified and delineated using the methods and criteria established in the Corps Wetland Delineation Manual (87 Manual) (i.e., occurrence of hydrophytic vegetation, hydric soils and wetland hydrology).

<sup>2</sup>The term "adjacent" means bordering, contiguous, or neighboring. Wetlands separated from other waters of the U.S. by man-made dikes or barriers, natural river berms, beach dunes, and the like are also adjacent.

JURISDICTIONAL DETERMINATION  
U.S. Army Corps of Engineers

Revised 8/13/04

DISTRICT OFFICE: Rock Island District  
FILE NUMBER: 2006-490D

PROJECT LOCATION INFORMATION:

State: Illinois  
County: McDonough  
Center coordinates of site (latitude/longitude): UTM Coordinates: 4475357 (Northing) 686803 (Easting)  
Approximate size of area (parcel) reviewed, including uplands: 1 acres.  
Name of nearest waterway: Troublesome Creek  
Name of watershed: Illinois River

JURISDICTIONAL DETERMINATION

Completed: Desktop determination  Date: April 12, 2006  
Site visit(s)  Date(s):

Jurisdictional Determination (JD):

- Preliminary JD - Based on available information,  *there appear to be* (or)  *there appear to be no* "waters of the United States" and/or "navigable waters of the United States" on the project site. A preliminary JD is not appealable (Reference 33 CFR part 331).
- Approved JD - An approved JD is an appealable action (Reference 33 CFR part 331).  
Check all that apply:
- There are* "navigable waters of the United States" (as defined by 33 CFR part 329 and associated guidance) within the reviewed area. Approximate size of jurisdictional area: acres.
- There are* "waters of the United States" (as defined by 33 CFR part 328 and associated guidance) within the reviewed area. Approximate size of jurisdictional area: 0.1 acres.
- There are* "isolated, non-navigable, intra-state waters or wetlands" within the reviewed area.  
 Decision supported by SWANCC/Migratory Bird Rule Information Sheet for Determination of No Jurisdiction.

BASIS OF JURISDICTIONAL DETERMINATION:

- A. Waters defined under 33 CFR part 329 as "navigable waters of the United States":
- The presence of waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
- B. Waters defined under 33 CFR part 328.3(a) as "waters of the United States":
- (1) The presence of waters, which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide.
- (2) The presence of interstate waters including interstate wetlands<sup>1</sup>.
- (3) The presence of other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate commerce including any such waters (check all that apply):
- (i) which are or could be used by interstate or foreign travelers for recreational or other purposes.
- (ii) from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- (iii) which are or could be used for industrial purposes by industries in interstate commerce.
- (4) Impoundments of waters otherwise defined as waters of the US.
- (5) The presence of a tributary to a water identified in (1) - (4) above.
- (6) The presence of territorial seas.
- (7) The presence of wetlands adjacent<sup>2</sup> to other waters of the US, except for those wetlands adjacent to other wetlands.

**Rationale for the Basis of Jurisdictional Determination (applies to any boxes checked above).** *If the jurisdictional water or wetland is not itself a navigable water of the United States, describe connection(s) to the downstream navigable waters. If B(1) or B(3) is used as the Basis of Jurisdiction, document navigability and/or interstate commerce connection (i.e., discuss site conditions, including why the waterbody is navigable and/or how the destruction of the waterbody could affect interstate or foreign commerce). If B(2, 4, 5 or 6) is used as the Basis of Jurisdiction, document the rationale used to make the determination. If B(7) is used as the Basis of Jurisdiction, document the rationale used to make adjacency determination:* The unnamed stream flows into Troublesome Creek which flows into the LaMoine River which is designated a federally navigable waterway.

**Lateral Extent of Jurisdiction:** (Reference: 33 CFR parts 328 and 329)

- Ordinary High Water Mark indicated by:
- clear, natural line impressed on the bank
  - the presence of litter and debris
  - changes in the character of soil
  - destruction of terrestrial vegetation
  - shelving
  - other:
- High Tide Line indicated by:
- oil or scum line along shore objects
  - fine shell or debris deposits (foreshore)
  - physical markings/characteristics
  - tidal gages
  - other:
- Mean High Water Mark indicated by:
- survey to available datum;  physical markings;  vegetation lines/changes in vegetation types.
- Wetland boundaries, as shown on the attached wetland delineation map and/or in a delineation report prepared by:

**Basis For Not Asserting Jurisdiction:**

- The reviewed area consists entirely of uplands.
- Unable to confirm the presence of waters in 33 CFR part 328(a)(1, 2, or 4-7).
- Headquarters declined to approve jurisdiction on the basis of 33 CFR part 328.3(a)(3).
- The Corps has made a case-specific determination that the following waters present on the site are not Waters of the United States:
- Waste treatment systems, including treatment ponds or lagoons, pursuant to 33 CFR part 328.3.
  - Artificially irrigated areas, which would revert to upland if the irrigation ceased.
  - Artificial lakes and ponds created by excavating and/or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing.
  - Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating and/or diking dry land to retain water for primarily aesthetic reasons.
  - Water-filled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States found at 33 CFR 328.3(a).
  - Isolated, intrastate wetland with no nexus to interstate commerce.
  - Prior converted cropland, as determined by the Natural Resources Conservation Service. Explain rationale:
  - Non-tidal drainage or irrigation ditches excavated on dry land. Explain rationale:
  - Other (explain):

**DATA REVIEWED FOR JURISDICTIONAL DETERMINATION (mark all that apply):**

- Maps, plans, plots or plat submitted by or on behalf of the applicant.
- Data sheets prepared/submitted by or on behalf of the applicant.
- This office concurs with the delineation report, dated \_\_\_\_\_, prepared by (company):
  - This office does not concur with the delineation report, dated \_\_\_\_\_, prepared by (company): .
- Data sheets prepared by the Corps.
- Corps' navigable waters' studies:
- U.S. Geological Survey Hydrologic Atlas:
  - U.S. Geological Survey 7.5 Minute Topographic maps: Colchester, IL
  - U.S. Geological Survey 7.5 Minute Historic quadrangles:
  - U.S. Geological Survey 15 Minute Historic quadrangles:
  - USDA Natural Resources Conservation Service Soil Survey:
  - National wetlands inventory maps: Colchester, IL
  - State/Local wetland inventory maps:
  - FEMA/FIRM maps (Map Name & Date):
  - 100-year Floodplain Elevation is: \_\_\_\_\_ (NGVD)
  - Aerial Photographs (Name & Date):
  - Other photographs (Date):
  - Advanced Identification Wetland maps:
  - Site visit/determination conducted on:
  - Applicable/supporting case law:
  - Other information (please specify):

<sup>1</sup>Wetlands are identified and delineated using the methods and criteria established in the Corps Wetland Delineation Manual (87 Manual) (i.e., occurrence of hydrophytic vegetation, hydric soils and wetland hydrology).

<sup>2</sup>The term "adjacent" means bordering, contiguous, or neighboring. Wetlands separated from other waters of the U.S. by man-made dikes or barriers, natural river berms, beach dunes, and the like are also adjacent.

DISTRICT OFFICE: Rock Island District  
FILE NUMBER: 2006-490C

**PROJECT LOCATION INFORMATION:**

State: Illinois  
County: McDonough  
Center coordinates of site (latitude/longitude): UTM Coordinates: 4475842 (Northing) 687584 (Easting)  
Approximate size of area (parcel) reviewed, including uplands: 1 acres.  
Name of nearest waterway: Troublesome Creek  
Name of watershed: Illinois River

**JURISDICTIONAL DETERMINATION**

Completed: Desktop determination  Date: April 12, 2006  
Site visit(s)  Date(s):

**Jurisdictional Determination (JD):**

- Preliminary JD - Based on available information,  *there appear to be* (or)  *there appear to be no* "waters of the United States" and/or "navigable waters of the United States" on the project site. A preliminary JD is not appealable (Reference 33 CFR part 331).
- Approved JD – An approved JD is an appealable action (Reference 33 CFR part 331).  
Check all that apply:
  - There are* "navigable waters of the United States" (as defined by 33 CFR part 329 and associated guidance) within the reviewed area. Approximate size of jurisdictional area: acres.
  - There are* "waters of the United States" (as defined by 33 CFR part 328 and associated guidance) within the reviewed area. Approximate size of jurisdictional area: 0.1 acres.
  - There are* "isolated, non-navigable, intra-state waters or wetlands" within the reviewed area.
    - Decision supported by SWANCC/Migratory Bird Rule Information Sheet for Determination of No Jurisdiction.

**BASIS OF JURISDICTIONAL DETERMINATION:**

**A. Waters defined under 33 CFR part 329 as "navigable waters of the United States":**

- The presence of waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

**B. Waters defined under 33 CFR part 328.3(a) as "waters of the United States":**

- (1) The presence of waters, which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide.
- (2) The presence of interstate waters including interstate wetlands<sup>1</sup>.
- (3) The presence of other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate commerce including any such waters (check all that apply):
  - (i) which are or could be used by interstate or foreign travelers for recreational or other purposes.
  - (ii) from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
  - (iii) which are or could be used for industrial purposes by industries in interstate commerce.
- (4) Impoundments of waters otherwise defined as waters of the US.
- (5) The presence of a tributary to a water identified in (1) – (4) above.
- (6) The presence of territorial seas.
- (7) The presence of wetlands adjacent<sup>2</sup> to other waters of the US, except for those wetlands adjacent to other wetlands.

**Rationale for the Basis of Jurisdictional Determination (applies to any boxes checked above).** *If the jurisdictional water or wetland is not itself a navigable water of the United States, describe connection(s) to the downstream navigable waters. If B(1) or B(3) is used as the Basis of Jurisdiction, document navigability and/or interstate commerce connection (i.e., discuss site conditions, including why the waterbody is navigable and/or how the destruction of the waterbody could affect interstate or foreign commerce). If B(2, 4, 5 or 6) is used as the Basis of Jurisdiction, document the rationale used to make the determination. If B(7) is used as the Basis of Jurisdiction, document the rationale used to make adjacency determination.* The unnamed stream flows into Troublesome Creek which flows into the LaMoine River which is designated a federally navigable waterway.



**Lateral Extent of Jurisdiction:** (Reference: 33 CFR parts 328 and 329)

- Ordinary High Water Mark indicated by:
- clear, natural line impressed on the bank
  - the presence of litter and debris
  - changes in the character of soil
  - destruction of terrestrial vegetation
  - shelving
  - other:
- High Tide Line indicated by:
- oil or scum line along shore objects
  - fine shell or debris deposits (foreshore)
  - physical markings/characteristics
  - tidal gages
  - other:
- Mean High Water Mark indicated by:
- survey to available datum;  physical markings;  vegetation lines/changes in vegetation types.
- Wetland boundaries, as shown on the attached wetland delineation map and/or in a delineation report prepared by:

**Basis For Not Asserting Jurisdiction:**

- The reviewed area consists entirely of uplands.
- Unable to confirm the presence of waters in 33 CFR part 328(a)(1, 2, or 4-7).
- Headquarters declined to approve jurisdiction on the basis of 33 CFR part 328.3(a)(3).
- The Corps has made a case-specific determination that the following waters present on the site are not Waters of the United States:
- Waste treatment systems, including treatment ponds or lagoons, pursuant to 33 CFR part 328.3.
  - Artificially irrigated areas, which would revert to upland if the irrigation ceased.
  - Artificial lakes and ponds created by excavating and/or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing.
  - Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating and/or diking dry land to retain water for primarily aesthetic reasons.
  - Water-filled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States found at 33 CFR 328.3(a).
  - Isolated, intrastate wetland with no nexus to interstate commerce.
  - Prior converted cropland, as determined by the Natural Resources Conservation Service. Explain rationale:
  - Non-tidal drainage or irrigation ditches excavated on dry land. Explain rationale:
  - Other (explain):

**DATA REVIEWED FOR JURISDICTIONAL DETERMINATION (mark all that apply):**

- Maps, plans, plots or plat submitted by or on behalf of the applicant.
- Data sheets prepared/submitted by or on behalf of the applicant.
- This office concurs with the delineation report, dated \_\_\_\_\_, prepared by (company):
- This office does not concur with the delineation report, dated \_\_\_\_\_, prepared by (company): .
- Data sheets prepared by the Corps.
- Corps' navigable waters' studies:
- U.S. Geological Survey Hydrologic Atlas:
- U.S. Geological Survey 7.5 Minute Topographic maps: Macomb, IL
- U.S. Geological Survey 7.5 Minute Historic quadrangles:
- U.S. Geological Survey 15 Minute Historic quadrangles:
- USDA Natural Resources Conservation Service Soil Survey:
- National wetlands inventory maps: Macomb, IL
- State/Local wetland inventory maps:
- FEMA/FIRM maps (Map Name & Date):
- 100-year Floodplain Elevation is: \_\_\_\_\_ (NGVD)
- Aerial Photographs (Name & Date):
- Other photographs (Date):
- Advanced Identification Wetland maps:
- Site visit/determination conducted on:
- Applicable/supporting case law:
- Other information (please specify):

<sup>1</sup>Wetlands are identified and delineated using the methods and criteria established in the Corps Wetland Delineation Manual (87 Manual) (i.e., occurrence of hydrophytic vegetation, hydric soils and wetland hydrology).

<sup>2</sup>The term "adjacent" means bordering, contiguous, or neighboring. Wetlands separated from other waters of the U.S. by man-made dikes or barriers, natural river berms, beach dunes, and the like are also adjacent.

**JURISDICTIONAL DETERMINATION**  
U.S. Army Corps of Engineers

Revised 8/13/04

**DISTRICT OFFICE:** Rock Island District  
**FILE NUMBER:** 2006-490B

**PROJECT LOCATION INFORMATION:**

State: Illinois  
County: McDonough  
Center coordinates of site (latitude/longitude): UTM Coordinates: 4477161 (Northing) 691645 (Easting)  
Approximate size of area (parcel) reviewed, including uplands: 1 acres.  
Name of nearest waterway: Killjordan Creek  
Name of watershed: Illinois River

**JURISDICTIONAL DETERMINATION**

**Completed:** Desktop determination  Date: April 12, 2006  
Site visit(s)  Date(s):

**Jurisdictional Determination (JD):**

Preliminary JD - Based on available information,  *there appear to be* (or)  *there appear to be no* "waters of the United States" and/or "navigable waters of the United States" on the project site. A preliminary JD is not appealable (Reference 33 CFR part 331).

Approved JD - An approved JD is an appealable action (Reference 33 CFR part 331).  
Check all that apply:

*There are* "navigable waters of the United States" (as defined by 33 CFR part 329 and associated guidance) within the reviewed area. Approximate size of jurisdictional area: acres.

*There are* "waters of the United States" (as defined by 33 CFR part 328 and associated guidance) within the reviewed area. Approximate size of jurisdictional area: 0.1 acres.

*There are* "isolated, non-navigable, intra-state waters or wetlands" within the reviewed area.  
 Decision supported by SWANCC/Migratory Bird Rule Information Sheet for Determination of No Jurisdiction.

**BASIS OF JURISDICTIONAL DETERMINATION:**

**A. Waters defined under 33 CFR part 329 as "navigable waters of the United States":**

The presence of waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

**B. Waters defined under 33 CFR part 328.3(a) as "waters of the United States":**

(1) The presence of waters, which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide.

(2) The presence of interstate waters including interstate wetlands<sup>1</sup>.

(3) The presence of other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate commerce including any such waters (check all that apply):

(i) which are or could be used by interstate or foreign travelers for recreational or other purposes.

(ii) from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.

(iii) which are or could be used for industrial purposes by industries in interstate commerce.

(4) Impoundments of waters otherwise defined as waters of the US.

(5) The presence of a tributary to a water identified in (1) - (4) above.

(6) The presence of territorial seas.

(7) The presence of wetlands adjacent<sup>2</sup> to other waters of the US, except for those wetlands adjacent to other wetlands.

**Rationale for the Basis of Jurisdictional Determination (applies to any boxes checked above).** *If the jurisdictional water or wetland is not itself a navigable water of the United States, describe connection(s) to the downstream navigable waters. If B(1) or B(3) is used as the Basis of Jurisdiction, document navigability and/or interstate commerce connection (i.e., discuss site conditions, including why the waterbody is navigable and/or how the destruction of the waterbody could affect interstate or foreign commerce). If B(2, 4, 5 or 6) is used as the Basis of Jurisdiction, document the rationale used to make the determination. If B(7) is used as the Basis of Jurisdiction, document the rationale used to make adjacency determination:* The unnamed stream flows into Killjordan Creek which flows into Troublesome Creek which flows into the LaMoine River which is designated a federally navigable waterway.

**SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT**

**REASONS FOR APPEAL OR OBJECTIONS:** (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

**ADDITIONAL INFORMATION:** The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

**POINT OF CONTACT FOR QUESTIONS OR INFORMATION:**

If you have questions regarding this decision and/or the appeal process you may contact:

Gene Walsh  
US Army Corps of Engineers District, Rock Island  
**ATTN: Regulatory Branch**  
Clock Tower Building  
Post Office Box 2004  
Rock Island, Illinois 61204-2004  
  
Telephone: 309/794-5674

If you only have questions regarding the appeal process you may also contact:

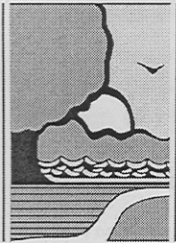
Elizabeth S. Guynes  
U.S. Army Corps of Engineers Division,  
Mississippi Valley  
ATTN: CEMVD-PD-KM  
P.O. Box 80  
Vicksburg, Mississippi 39181-0080  
  
Telephone: 601/634-5820  
Fax : 601/634-7073

**RIGHT OF ENTRY:** Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

\_\_\_\_\_  
Signature of appellant or agent.

Date:

Telephone number:

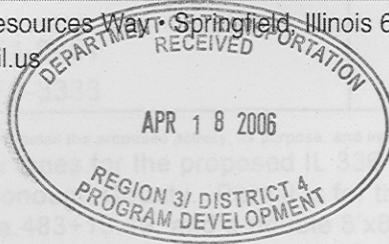
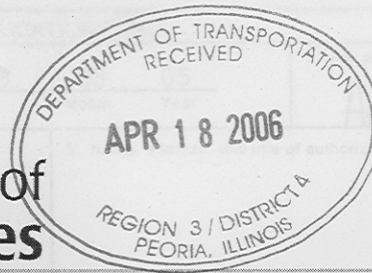


# Illinois Department of Natural Resources

One Natural Resources Way • Springfield, Illinois 62702-1271  
http://dnr.state.il.us

Rod R. Blagojevich, Governor

Joel Brunsvold, Director



April 13, 2006

Illinois DOT, Division of Highways (Dist 4)

IL 336 (SN 60, 61, 2501, 2502, 2503)

## PERMIT NOT REQUIRED NOTIFICATION LETTER

Thank you for the recent submittal regarding the project as shown on the enclosed copy of your submittal. Based on our review of the information you provided and in accordance with the Rivers, Lakes and Streams Act [615 ILCS 5], a Department of Natural Resources, Office of Water Resources permit will not be required for this work because:

- The Department does not have jurisdiction over streams with drainage areas of less than one square mile in an urban area, or ten square miles in a rural area. The site of the work is located where the drainage area is below these jurisdictional limits.
- The Department does not have regulatory authority over activities outside the floodway of jurisdictional streams. The floodway is the portion of the floodplain that must remain open and unrestricted to carry flood flows. While the construction site is located outside the floodway, it appears to be located in the floodplain. The work may, therefore, be subject to flood risk.
- The Department does not have jurisdiction over construction on non-public lakes in which the project would not impact the dam, traverse the lake or impact the flood carrying capacity of the stream(s) that feed the lake.
- The Department does not have jurisdiction over Class III (low hazard) dams which meet **all** of the following criteria: a dam height of less than 25 feet; an impounding capacity of less than 50 acre-feet (calculated at the top of dam); and a drainage area of less than ten square miles in a rural area, or one square mile in an urban area. If modifications are proposed to the dam, this office should be contacted for a determination of permit applicability prior to initiation of construction. Also, future changes in downstream land use could change the hazard classification making a permit and dam modification necessary.
- The proposed activity is considered routine maintenance or repair work and is exempt from the Department's permit requirements.

If you have any questions or comments concerning the above determination, please feel free to contact the person noted below at 217/782-3863. This letter is not to be construed as a release from any other federal, state or local laws or regulations. If the project involves work in a wetland or in a floodplain and if you have not already done so, you should contact the U. S. Army Corps of Engineers and the local regulatory authority to ascertain applicable federal and local requirements.

- |                                      |  |  |
|--------------------------------------|--|--|
| <input type="checkbox"/> Rod Johnson | <input type="checkbox"/> Scott Arends  | <input type="checkbox"/> Jason Campbell      |
| <input type="checkbox"/> Rob Giesing | <input type="checkbox"/> Mark McCauley | <input checked="" type="checkbox"/> Wes Rust |

BY: Wes Rust

- cc:  U. S. Army COE \_\_\_\_\_ Dist. w/encl.       Local Office McDonough County w/encl
- IEPA w/encl.       Agent \_\_\_\_\_ w/encl.
- IDNR/OREP (Robert Schanzle) w/encl.

**REQUIRED CONTRACT PROVISIONS  
FEDERAL-AID CONSTRUCTION CONTRACTS**

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**ATTACHMENTS**

- A. Employment Preference for Appalachian Contracts  
(included in Appalachian contracts only)

**I. GENERAL**

1. These contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

2. Except as otherwise provided for in each section, the contractor shall insert in each subcontract all of the stipulations contained in these Required Contract Provisions, and further require their inclusion in any lower tier subcontract or purchase order that may in turn be made. The Required Contract Provisions shall not be incorporated by reference in any case. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with these Required Contract Provisions.

3. A breach of any of the stipulations contained in these Required Contract Provisions shall be sufficient grounds for termination of the contract.

4. A breach of the following clauses of the Required Contract Provisions may also be grounds for debarment as provided in 29 CFR 5.12:

- Section I, paragraph 2;
- Section IV, paragraphs 1, 2, 3, 4 and 7;
- Section V, paragraphs 1 and 2a through 2g.

5. Disputes arising out of the labor standards provisions of Section IV (except paragraph 5) and Section V of these Required Contract Provisions shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the U.S. Department of Labor (DOL) as set forth in 29 CFR 5, 6 and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the DOL, or the contractor's employees or their representatives.

6. Selection of Labor: During the performance of this contract, the contractor shall not:

- a. Discriminate against labor from any other State, possession, or territory of the United States (except for employment preference for Appalachian contracts, when applicable, as specified in Attachment A), or
- b. Employ convict labor for any purpose within the limits of the project unless it is labor performed by convicts who are on parole, supervised release, or probation.

**II. NONDISCRIMINATION**

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630 and 41 CFR 60 (and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The Equal Opportunity Construction Contract Specifications set forth under 41 CFR 60-4.3 and the provisions of the American Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the State highway agency (SHA) and the Federal Government in carrying out EEO obligations and in their review of his/her activities under the contract.

b. The contractor will accept as his operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, preapprenticeship, and/or on-the-job-training."

2. EEO Officer: The contractor will designate and make known to the SHA contracting officers an EEO Officer who will have the responsibility for an must be capable of effectively administering and promoting an active contractor program of EEO and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above

agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minority group employees.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minority groups in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employees referral sources likely to yield qualified minority group applicants. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish which such identified sources procedures whereby minority group applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, he is expected to observe the provisions of that agreement to the extent that the system permits the contractor's compliance with EEO contract provisions. (The DOL has held that where implementation of such agreements have the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Executive Order 11246, as amended.)

c. The contractor will encourage his present employees to refer minority group applicants for employment. Information and procedures with regard to referring minority group applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any

evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with his obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of his avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minority group and women employees, and applicants for employment.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision.

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of minority group and women employees and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. Actions by the contractor either directly or through a contractor's association acting as agent will include the procedures set forth below:

a. The contractor will use best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.

b. The contractor will use best efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to

the SHA and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of minority and women referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or quailifiable minority group persons and women. (The DOL has held that it shall be no excuse that the union with which the contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the SHA.

8. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment.

a. The contractor shall notify all potential subcontractors and suppliers of his/her EEO obligations under this contract.

b. Disadvantaged business enterprises (DBE), as defined in 49 CFR 23, shall have equal opportunity to compete for and perform subcontracts which the contractor enters into pursuant to this contract. The contractor will use his best efforts to solicit bids from and to utilize DBE subcontractors or subcontractors with meaningful minority group and female representation among their employees. Contractors shall obtain lists of DBE construction firms from SHA personnel.

c. The contractor will use his best efforts to ensure subcontractor compliance with their EEO obligations.

9. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the SHA and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women;

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees; and

(4) The progress and efforts being made in securing the services of DBE subcontractors or subcontractors with meaningful minority and female representation among their employees.

b. The contractors will submit an annual report to the SHA each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data.

### III. NONSEGREGATED FACILITIES

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

a. By submission of this bid, the execution of this contract or subcontract, or the consummation of this material supply agreement or purchase order, as appropriate, the bidder, Federal-aid construction contractor, subcontractor, material supplier, or vendor, as appropriate, certifies that the firm does not maintain or provide for its employees any segregated facilities at any of its establishments, and that the firm does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The firm agrees that a breach of this certification is a violation of the EEO provisions of this contract. The firm further certifies that no employee will be denied access to adequate facilities on the basis of sex or disability.

b. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, timeclocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive, or are, in fact, segregated on the basis of race, color, religion, national origin, age or disability, because of habit, local custom, or otherwise. The only exception will be for the disabled when the demands for accessibility override (e.g. disabled parking).

c. The contractor agrees that it has obtained or will obtain identical certification from proposed subcontractors or material suppliers prior to award of subcontracts or consummation of material supply agreements of \$10,000 or more and that it will retain such certifications in its files.

### IV. PAYMENT OF PREDETERMINED MINIMUM WAGE

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural minor collectors, which are exempt.)

#### 1. General:

a. All mechanics and laborers employed or working upon the site of the work will be paid unconditionally and not less often than once a week and without subsequent deduction or rebate on any account [except such payroll deductions as are permitted by regulations (29 CFR 3) issued by the Secretary of Labor under the Copeland Act (40 U.S.C. 276c)] the full amounts of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment. The payment shall be computed at wage rates not less than those contained in the wage determination of the Secretary of Labor (hereinafter "the wage determination") which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the

contractor or its subcontractors and such laborers and mechanics. The wage determination (including any additional classifications and wage rates conformed under paragraph 2 of this Section IV and the DOL poster (WH-1321) or Form FHWA-1495) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers. For the purpose of this Section, contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act (40 U.S.C. 276a) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of Section IV, paragraph 3b, hereof. Also, for the purpose of this Section, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in paragraphs 4 and 5 of this Section IV.

b. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein, provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed.

c. All rulings and interpretations of the Davis-Bacon Act and related acts contained in 29 CFR 1, 3, and 5 are herein incorporated by reference in this contract.

## 2. Classification:

a. The SHA contracting officer shall require that any class of laborers or mechanics employed under the contract, which is not listed in the wage determination, shall be classified in conformance with the wage determination.

b. The contracting officer shall approve an additional classification, wage rate and fringe benefits only when the following criteria have been met:

(1) the work to be performed by the additional classification requested is not performed by a classification in the wage determination;

(2) the additional classification is utilized in the area by the construction industry;

(3) the proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and

(4) with respect to helpers, when such a classification prevails in the area in which the work is performed.

c. If the contractor or subcontractors, as appropriate, the laborers and mechanics (if known) to be employed in the additional classification or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the DOL, Administrator of the Wage and Hour Division, Employment Standards Administration, Washington, D.C. 20210. The Wage and Hour Administrator, or an authorized representative, will approve, modify, or

disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

d. In the event the contractor or subcontractors, as appropriate, the laborers or mechanics to be employed in the additional classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the question, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. Said Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advised the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

e. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 2c or 2d of this Section IV shall be paid to all workers performing work in the additional classification from the first day on which work is performed in the classification.

## 3. Payment of Fringe Benefits:

a. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor or subcontractors, as appropriate, shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly case equivalent thereof.

b. If the contractor or subcontractor, as appropriate, does not make payments to a trustee or other third person, he/she may consider as a part of the wages of any laborer or mechanic the amount of any cost reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided that the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

## 4. Apprentices and Trainees (Programs of the U.S. DOL) and Helpers:

### a. Apprentices:

(1) Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the DOL, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau, or if a person is employed in his/her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State apprenticeship agency (where appropriate) to be eligible for probationary employment as an apprentice.

(2) The allowable ratio of apprentices to journeyman-level employees on the job site in any craft classification shall not



be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate listed in the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor or subcontractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman-level hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

(3) Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator for the Wage and Hour Division determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

(4) In the event the Bureau of Apprenticeship and Training, or a State apprenticeship agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor or subcontractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the comparable work performed by regular employees until an acceptable program is approved.

b. Trainees:

(1) Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the DOL, Employment and Training Administration.

(2) The ratio of trainees to journeyman-level employees on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(3) Every trainee must be paid at not less than the rate specified in the approved program for his/her level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits

Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman-level wage rate on the wage determination which provides for less than full fringe benefits for apprentices, in which cases such trainees shall receive the same fringe benefits as apprentices.

(4) In the event the Employment and Training Administration withdraws approval of a training program, the contractor or subcontractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Helpers:

Helpers will be permitted to work on a project if the helper classification is specified and defined on the applicable wage determination or is approved pursuant to the conformance procedure set forth in Section IV. 2. Any worker listed on a payroll at a helper wage rate, who is not a helper under a approved definition, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed.

5. Apprentices and Trainees (Programs of the U.S. DOT):

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

6. Withholding:

The SHA shall upon its own action or upon written request of an authorized representative of the DOL withhold, or cause to be withheld, from the contractor or subcontractor under this contract or any other Federal contract with the same prime contractor or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements which is held by the same prime contractor, as much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainee's and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the SHA contracting officer may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

7. Overtime Requirements:

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers, mechanics, watchmen, or guards (including apprentices, trainees, and helpers described in paragraphs 4 and 5 above) shall require or permit any laborer, mechanic, watchman, or guard in any workweek in which he/she is employed on such work, to work in excess of 40 hours in such workweek unless such laborer, mechanic, watchman, or guard receives compensation at a rate not less than one-and-one-half times his/her basic rate of pay for all hours worked in excess of 40 hours in such workweek.

## 8. Violation:

Liability for Unpaid Wages; Liquidated Damages: In the event of any violation of the clause set forth in paragraph 7 above, the contractor and any subcontractor responsible thereof shall be liable to the affected employee for his/her unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory) for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer, mechanic, watchman, or guard employed in violation of the clause set forth in paragraph 7, in the sum of \$10 for each calendar day on which such employee was required or permitted to work in excess of the standard work week of 40 hours without payment of the overtime wages required by the clause set forth in paragraph 7.

## 9. Withholding for Unpaid Wages and Liquidated Damages:

The SHA shall; upon its own action or upon written request of any authorized representative of the DOL withhold, or cause to be withheld, from any monies payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph 8 above.

## V. STATEMENTS AND PAYROLLS

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural collectors, which are exempt.)

### 1. Compliance with Copeland Regulations (29 CFR 3):

The contractor shall comply with the Copeland Regulations of the Secretary of Labor which are herein incorporated by reference.

### 2. Payrolls and Payroll Records:

a. Payrolls and basic records relating thereto shall be maintained by the contractor and each subcontractor during the course of the work and preserved for a period of 3 years from the date of completion of the contract for all laborers, mechanics, apprentices, trainees, watchmen, helpers, and guards working at the site of the work.

b. The payroll records shall contain the name, social security number, and address of each such employee; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof the types described in Section 1(b)(2)(B) of the Davis Bacon Act); daily and weekly number of hours worked; deductions made; and actual wages paid. In addition, for Appalachian contracts, the payroll records shall contain a notation indicating whether the employee does, or does not, normally reside in the labor area as defined in Attachment A, paragraph 1. Whenever the Secretary of Labor, pursuant to Section IV, paragraph 3b, has found that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan

or program described in Section 1(b)(2)(B) of the Davis Bacon Act, the contractor and each subcontractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, that the plan or program has been communicated in writing to the laborers or mechanics affected, and show the cost anticipated or the actual cost incurred in providing benefits. Contractors or subcontractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprentices and trainees, and ratios and wage rates prescribed in the applicable programs.

c. Each contractor and subcontractor shall furnish, each week in which any contract work is performed, to the SHA resident engineer a payroll of wages paid each of its employees (including apprentices trainees, and helpers, described in Section IV, paragraphs 4 and 5, and watchmen and guards engaged on work during the preceding weekly payroll period).

The payroll submitted shall set out accurately and completely all of the information required to be maintained under paragraph 2b of this Section V.

This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal stock number 029-005-0014-1), U.S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors.

d. Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his/her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) that the payroll for the payroll period contains the information required to be maintained under paragraph 2b of this Section V and that such information is correct and complete;

(2) that such laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in the Regulations, 29 CFR 3;

(3) that each laborer or mechanic has been paid not less than the applicable wage rate and fringe benefits or cash equivalent for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

e. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 2d of this Section V.

f. The falsification of any of the above certifications may subject the contractor to civil or criminal prosecution under 18 U/S. C. 1001 and 31 U.S.C. 231.

g. The contractor or subcontractor shall make the records required under paragraph 2b of this Section V available for

inspection, copying, or transcription by authorized representatives of the SHA, the FHWA, or the DOL, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the SHA, the FHWA, the DOL, or all may, after written notice to the contractor, sponsor, applicant, or owner, take such actions as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

## **VI. RECORD OF MATERIALS, SUPPLIES, AND LABOR**

1. On all federal-aid contracts on the national highway system, except those which provide solely for the installation of protective devices at railroad grade crossings, those which are constructed on a force account or direct labor basis, highway beautification contracts, and contracts for which the total final construction cost for roadway and bridge is less than \$1,000,000 (23 CFR 635) the contractor shall:

- a. Become familiar with the list of specific materials and supplies contained in Form FHWA-47, "Statement of Materials and Labor Used by Contractor of Highway Construction Involving Federal Funds," prior to the commencement of work under this contract.
- b. Maintain a record of the total cost of all materials and supplies purchased for and incorporated in the work, and also of the quantities of those specific materials and supplies listed on Form FHWA-47, and in the units shown on Form FHWA-47.
- c. Furnish, upon the completion of the contract, to the SHA resident engineer on Form FHWA-47 together with the data required in paragraph 1b relative to materials and supplies, a final labor summary of all contract work indicating the total hours worked and the total amount earned.

2. At the prime contractor's option, either a single report covering all contract work or separate reports for the contractor and for each subcontract shall be submitted.

## **VII. SUBLETTING OR ASSIGNING THE CONTRACT**

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the State. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635).

- a. "Its own organization" shall be construed to include only workers employed and paid directly by the prime contractor and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor, assignee, or agent of the prime contractor.
- b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid on the contract as a

whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph 1 of Section VII is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the SHA contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the SHA contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract.

Written consent will be given only after the SHA has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

## **VIII. SAFETY: ACCIDENT PREVENTION**

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the SHA contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S. C. 333).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

## **IX. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS**

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification,

distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, the following notice shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

**NOTICE TO ALL PERSONNEL ENGAGED ON FEDERAL-AID HIGHWAY PROJECTS**

18 U.S.C. 1020 reads as follows:

*“Whoever, being an officer, agent or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or*

*Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or*

*Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;*

*Shall be fined not more than \$10,000 or imprisoned not more than 5 years or both.”*

**X. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT**

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$100,000 or more).

By submission of this bid or the execution of this contract, or subcontract, as appropriate, the bidder, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any facility that is or will be utilized in the performance of this contract, unless such contract is exempt under the Clean Air Act, as amended (42 U.S.C. 1857 et seq., as amended by Pub.L. 91-604), and under the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq., as amended by Pub.L. 92-500), Executive Order 11738, and regulations in implementation thereof (40 CFR 15) is not listed, on the date of contract award, on the U.S. Environmental Protection Agency (EPA) List of Violating Facilities pursuant to 40 CFR 15.20.

2. That the firm agrees to comply and remain in compliance with all the requirements of Section 114 of the Clean Air Act and Section 308 of the Federal Water Pollution Control Act and all regulations and guidelines listed thereunder.

3. That the firm shall promptly notify the SHA of the receipt of

any communication from the Director, Office of Federal Activities, EPA indicating that a facility that is or will be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.

4. That the firm agrees to include or cause to be included the requirements of paragraph 1 through 4 of this Section X in every nonexempt subcontract, and further agrees to take such action as the government may direct as a means of enforcing such requirements.

**XI. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION**

1. Instructions for Certification - Primary Covered Transactions:

(Applicable to all Federal-aid contracts - 49 CFR 29)

a. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause of default.

d. The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is submitted if any time the prospective primary participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms “covered transaction,” “debarred,” “suspended,” “ineligible,” “lower tier covered transaction,” “participant,” “person,” “primary covered transaction,” “principal,” “proposal,” and “voluntarily excluded,” as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the department or agency to which this proposal is submitted for assistance in obtaining a copy of those regulations.

f. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled

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"Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the nonprocurement portion of the "Lists of Parties Excluded from Federal Procurement or Nonprocurement Programs" (Nonprocurement List) which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph f of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

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### **Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Primary Covered Transactions**

1. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:

- a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- b. Have not within a 3-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph 1b of this certification; and
- d. Have not within a 3-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

2. Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

### **2. Instructions for Certification - Lower Tier Covered Transactions:**

(Applicable to all subcontracts, purchase orders and other lower tier transactions of \$25,000 or more - 49 CFR 29)

- a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
- c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
- d. The terms "covered transaction," "debarred," "suspended," "ineligible," "primary covered transaction," "participant," "person," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.
- e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
- g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.
- h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealing.
- i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily

excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

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**Certification Regarding Debarment, Suspension, Ineligibility And Voluntary Exclusion-Lower Tier Covered Transactions:**

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

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**XII. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING**

(Applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 - 49 CFR 20)

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

## **MINIMUM WAGES FOR FEDERAL AND FEDERALLY ASSISTED CONSTRUCTION CONTRACTS**

This project is funded, in part, with Federal-aid funds and, as such, is subject to the provisions of the Davis-Bacon Act of March 3, 1931, as amended (46 Sta. 1494, as amended, 40 U.S.C. 276a) and of other Federal statutes referred to in a 29 CFR Part 1, Appendix A, as well as such additional statutes as may from time to time be enacted containing provisions for the payment of wages determined to be prevailing by the Secretary of Labor in accordance with the Davis-Bacon Act and pursuant to the provisions of 29 CFR Part 1. The prevailing rates and fringe benefits shown in the General Wage Determination Decisions issued by the U.S. Department of Labor shall, in accordance with the provisions of the foregoing statutes, constitute the minimum wages payable on Federal and federally assisted construction projects to laborers and mechanics of the specified classes engaged on contract work of the character and in the localities described therein.

General Wage Determination Decisions, modifications and supersedes decisions thereto are to be used in accordance with the provisions of 29 CFR Parts 1 and 5. Accordingly, the applicable decision, together with any modifications issued, must be made a part of every contract for performance of the described work within the geographic area indicated as required by an applicable DBRA Federal prevailing wage law and 29 CFR Part 5. The wage rates and fringe benefits contained in the General Wage Determination Decision

### **NOTICE**

The most current **General Wage Determination Decisions** (wage rates) are available on the IDOT web site. They are located on the Letting and Bidding page at <http://www.dot.il.gov/desenv/delett.html>.

In addition, ten (10) days prior to the letting, the applicable Federal wage rates will be e-mailed to subscribers. It is recommended that all contractors subscribe to the Federal Wage Rates List or the Contractor's Packet through IDOT's subscription service.

PLEASE NOTE: if you have already subscribed to the Contractor's Packet you will automatically receive the Federal Wage Rates.

The instructions for subscribing are at <http://www.dot.il.gov/desenv/subsc.html>.

If you have any questions concerning the wage rates, please contact IDOT's Chief Contract Official at 217-782-7806.